THE
Merchant's Magazine:
OR,
Trades-Man's Treasury.

CONTAINING,

I. **Arithmetick** in Whole *Numbers* and *Fractions*, Vulgar and Decimal; with the Reason and Demonstration of each Rule: Adorn'd with curious Copper-Cuts of the chief Tables and Titles.

II. **Merchants Accompts**, or a most Concise Way of Casting up the Value of *Merchandize*, *Tare* and *Trett*, *Interest of Coin*, *Rules of Barter*, *Loss and Gain*, *Fellowship*, *Equation of Payment*, and several Matters relating to *Exchange*. Never before made Publick.

III. **Book-keeping**, after a Plain, Easie, and Natural Method; shewing how to *Enter*, *Post*, *Close*, and *Ballance an Accompt*, &c.

IV. **Writing** concerning *Bills of Exchange*, *Factors* and *Factorage*: The Law concerning *Brokers*, &c.

V. The **Post** of **Letters** to and from Foreign Countries, and the Days when Mails are sent to, and due from those Countries.

VI. An Account of the **Commodities** produced by all Countries; Their chief Towns of Trade, and Bigness of the Country compar'd with *England*.

VII. A *Merchant* or *Trader's* **Dictionary**, Explaining the most Difficult Terms used in Trade.

VIII. **Presidents** of Merchants Writings: as, *Bills of Lading*, *Invoyces*, *Bills of Exchange*, *Letters of Credit*, *Charter-Parties*, &c. With many other Things not Extant before, as by the *Table of Contents* appears.

Accomodated chiefly to the Practice of *Merchants* and *Trades-men*: But is likewise useful for Schools, Bankers, Diversion of Gentlemen, Business of Mechanicks, and Officers of the King's Custom and Excise.

The Third Edition with Improvements.

By *E. HATTON*, Philomercat.

Arbore dejecta quivis ligna colligit. Juven.

LONDON, Printed by *J. H.* for *Chr. Coningsby*, at the *Golden-Turk's-Head* against St. *Dunstan's* Church in *Fleetstreet*, and *Tho. Leigh*, and *Dan. Midwinter*, at the *Rose* and *Crown* in St. *Paul's* Church-yard. 1699.

Licensed,

Nov. 30. 1694.

Edw. Cook.

To the Right Honourable Sir FRANCIS CHILD, *Knight*; *Lord Mayor of the City of* LONDON.

May it please your Lordship,

THE Subject of the following Treatise relating Chiefly to Trade, (a Thing by which this Opulent City whereof You are, to the General Satisfaction of the whole, Chief Magistrate and Governour; owes much of that Greatness which makes it justly Esteemed and Admired by all Nations) seems naturally (together with the vast Number of Merchants and Traders within Your Jurisdiction) to seek Protection and Countenance from Your Lordship; who being a known Encourager

of useful Arts, and especially such as tend to the promotion of Commerce and Traffick, induced me to Tender to Your Lordship the first Fruits of my Study this way; which having found acceptation in the World, I please my self with hoping it will be also favoured with Your Lordship's Approbation, which will be a means not only to Engage its perusal by some that would otherwise remain ignorant of its utility; but also be an ample Compensation for the pains which the Compiling thereof Cost.

Your Lordship's most Humble

and most Obedient Servant,

E. Hatton.

To the Ingenious Author.

BY Numbers pow'rfull, and harmonious Aid,
This ſtately Fabrick of the World was made.
The mighty Fiat *was no ſooner ſaid,*
But tunefull Numbers readily obey'd,
And the rude Chaos, *Form, and Beauty had.*
Since, to Mankind ſubſervient they become,
And ſuffer not that his wild Fancy roam,
But when it erring ſtrays, conduct it home.
By a long Series *found of mighty uſe,*
Humane Affairs, to method to reduce.
By theſe, (after long Hazard, Toil and Pains,
Th'adventrous Merchant counts his Loſs or Gains,
What is his Charge, and what that Charge maintains.
By theſe, each Art, and Science, is made known,
And their dark Myſteries, reveal'd and ſhown.
By theſe, we Wars and Sieges undertake,
Great Conqueſts gain, and brave Defences make.
By theſe, we ſadly count for a paſt Life,
Made up of Labour, Sorrow, Care and Strife.
By theſe, we compaſs Earth, and Seas about,
By theſe, all's done, and nothing done without.
Yet, we were in Traditions dull track got,
And this ſtill copy'd what a former wrote,
And talk'd thereof, as Parrots do by rote.
But you, to ſhow your Pity, and your Love,
Reaſon and Practice, make together move,
And a dull Age, as 'twere by Force improve.
Whilſt others, poorly coaſt along the Shoar,
By Reaſon's Compaſs, you have ventur'd o're,
And taught us foreign Truths, unknown before.
Go on, but know, great Danger you muſt run
Of Rocks call'd Criticks, *you may ſplit upon.*
I'll but this ſhort Deſcription of 'em mention,
They all things damn, for want of apprehenſion.
But (for their Int'reſt) let the Wiſe be kind,
By this they'll judge what ſtill remains behind,
In the Rich Treaſury of your wealthy Mind.

P. C.

To my very Ingenious Friend, the Author of the following Treatiſe.

OUR Youth Arithmetick, like Tricks are taught,
Which Monkeys are to do by Practice brought;
And hardly the Foundation better know,
Or reaſon of their working Numbers ſo,
But mimick juſt as they ſee others do.
'Tis you my Friend alone, have took away
This cloud of Ignorance; by the bright Ray
Of Reaſon's Light we now can walk and ſee
Our practis'd Rules do with our Senſe agree.
Safely we now on the Foundation tread,
And you through all the knotty Labyrinth lead.
You open to the World ſo clear a way,
They hardly, if they would, could go aſtray.
But pardon me, I leſſon by my praiſe
Your approv'd worth which I attempt to raiſe;
And theſe few Lines do only tell the Town
What was to every man before well known.
Accept then what as Praiſe I would intend,
And if I injure you while I commend,
Oh, take it as the fondneſs of your Friend.

C. J.

THE

Bookſellers to the Reader.

SInce every one is not a Competent Judge of the Intrinſick worth of Books, ſo as to diſtinguiſh between thoſe of the ſame Subject whether well or ill done; And ſince all thoſe that apply themſelves to the Study of Arithmetick, or any other Art or Myſtery, would certainly make choice of ſuch Tracts to inſtruct them as are moſt likely to accompliſh them in a ſhort time, but are altogether unfit to chuſe for themſelves by reaſon of their ignorance in matters of that nature: for the ſake of ſuch we thought it might not be improper to let them know the Excellency of the following Treatiſe, not only from the Acceptation it hath found in the World, but alſo from the following Account given of it (among others) by the Authors of the *Works of the Learned* for the Month of *February* 1695.

It's needleſs for us to inſiſt on the Uſefulneſs of the Work, or ſpend many words to give you an Idea of it, the Ingenious Author having already perform'd that in his Title Page: Only this we ſhall venture to ſay, that though it be with many Books, as it is with Perſons who have a plump Countenance and a conſumptive Body, the diligent Peruſer will not find this Book to be ſuch; but on the contrary, that the Author doth faithfully perform what his Title promiſes, and that in the moſt rational, plain, and compendious Manner of any that we have hitherto ſeen upon the Subject. Nor can we forbear giving this Judgment of the Work, That it deſerves Encouragement from the Publick,

as

as being calculated for the Improvement of Trade and Commerce, to which our Engliſh Nation is ſo much indebted for their Fame and Grandeur, and that great Figure which they make in the World. And ſeeing the general Current of Education amongſt the midling ſort of People, and not a few of the Gentry, does in our days run towards Trade and Merchandize, we cannot but conceive that this Book, if once known, will meet with a general Acceptation by all Men of buſineſs; who though they may perhaps think that they don't ſtand much in need of it themſelves, yet muſt certainly be convinc'd of its Uſefulneſs on many occaſions to Men of the greateſt Experience; and that it is abſolutely needful for their Children and Servants, if they deſign to imploy them in Trade or Commerce, or have occaſion to travel. And how much Labour it may ſave to School-maſters, and Toil and Vexation to Scholars, thoſe who are converſant in ſuch Affairs, will be better able to judg than we are to expreſs.

Since which Firſt Impreſſion 14 or 15 Sheets having been added in the Second, beſides ſome material Additions and Alterations in this Third; we doubt not but upon peruſal every unbyaſſed Reader will find the Character to be no more than the genuine merits of the Book, the Author having not contented himſelf to run in the common footſteps made by others, but hath induſtriouſly expanded ſuch new and unknown Paths as will afford the Students therein both pleaſure and advantage in their progreſs thro' thoſe many difficulties that are commonly met with in the two Spacious Fields *Arithmetick* and *Merchandizing*, moſt of whoſe ſeeming Roughneſs and Curveture he hath Level'd, and made ſmooth ſtreight and delightfull by eaſie Rules and plain Demonſtrations.

The

The Epiſtle to the Reader.

Courteous Reader,

THE Firſt *Impreſſion of this Treatiſe (though not ſo perfect in every reſpect as I could have wiſhed, as being Compoſed, Printed and Publiſhed with too much Precipitation,) having however for its uſefulneſs and familiarity found Acceptation in the World, exceeding my Expectation: I thought my ſelf obliged in point of Gratitude to endeavour in the* Second, *not only to rectifie and compleat what was amiſs or imperfect in the former, but alſo to ſtudy how (according to my utmoſt ability,) I might make it a Book farther uſefull to the Publick. And in order thereto, I made many conſiderable Additions; as, in* Arithmetick in Whole Numbers, *I added a Table of the Latin or Literal Numbers; ſeveral Tables in Addition, and a Diſcourſe of the Uſe of thoſe Tables: In* Diviſion, *a new Demonſtration; And the manner of Reducing any Summ of Foreign Coin into Engliſh, for the ready Caſting up Bills of Exchange. In* Vulgar Fractions, *I added the Reaſon of all thoſe myſterious Rules given for Reducing, Adding, Subſtracting, Multiplying and Dividing thereof; and did the like in Decimals ſhewing how the Nature of them agrees with the Vulgar. In* Merchants Accompts, *I added the Reaſon of the moſt abſtruſe Rules given for the brief working of Queſtions in* Practice; *And a more eaſie and (in many Caſes) conciſe Method of finding the Tare of any Commodity: And in* Exchange, *I added ſeveral uſefull Tables of Coin and Weight, with the manner of Calculating the* Par *of Foreign Coin by the Weight and Fineneſs; as alſo an Explanation of the Tables of the Courſe of Exchange, and diverſity of Proportions between Gold and Silver, Fine or Standard. In* Book-keeping, *I added Examples of a Caſh Book, Books of Houſhold-Expences, and Charges of Merchandize, and ſhewed how the latter are Poſted into the former, and thence into the* Ledger. *Where, as alſo in the* Journal, *I added References to the Folio's where every Parcel of Goods or other matter is placed, both Debtor and Creditor in the* Ledger; *and likewiſe a better and more Na-*

tural way of keeping an Alphabet of Names. As to Maxims for Drawing and Accepting Bills of Exchange, I made them more Copious and Methodical; And added several concerning Factors, as may be seen in Chap. 11. *And I likewise added* Chap. 12. *which shews what Commodities are produced by all Countries in the World, with the Names of their chief Towns of Trade, and the Magnitude of such Country compared with* England, *according to the best Account I could learn by Reading, Discourse, or Calculation. And I inserted (from* Keeble's *Statutes at large) the Law concerning the Post and Postage of Foreign Letters, (as also that concerning Interest of Coin and Bankrupts in other places of this Book;) and also shewed when Letters may be sent to, and Mails are due from those Countries. And in* Chap 14. *I Explained all the mysterious Terms or Words I could think on, that relate to Merchandizing; many of which, I am sure, are not to be found in any Expositor extant. And lastly, I added the greatest variety of Merchants Presidents in the best and most practical Method that are any where (to my knowledge) exhibited; which will be not only usefull for Practice to be transcribed upon occasion, but also will afford much light into the Nature of that part of Trade which they relate to.*

And thus I have given the Reader a Summary Account of the most material Additions, though there are very many (besides some few Alterations and Additions in this Third Impression) which I have here omitted to mention, and I hope the whole will prove not only pleasant, but profitable, especially to the Younger sort of most Professions, and more particularly to the Merchant, for the Meridian of whose Province it was chiefly Calculated; well knowing, that whatever conduceth to the facile and speedy carrying on of Trade, does also contribute to the Augmentation of the Bulk thereof, and consequently to the Riches and Grandure of the Nation: For as the ingenious and accomplish'd Merchant, Sir Josiah Child, *says,* The Greatness of this Kingdom depends on Foreign Trade; and therefore the Interest of Trade not unbecoming Persons of the highest Rank. *'Tis observable of the Dutch, That they Erect the most Noble Tombs and Statues to the Memory of their famous Sea-*

Com-

Commanders; which is a certain Indication that they are ſenſible of the vaſt Advantages that accrue to them by their Shipping; and I heartily wiſh we in this Nation were not leſs apprehenſive thereof, we ſhould not ſee ſo many Eminent perſons, of competent Fortunes, ſquander the ſame away, becauſe they know not how to employ or improve them, and that cauſed by their Parents looking on their Extract to be above the Sphere of Commerce. Indeed the ill practices of ſome Traders (eſpecially the meaner ſort of Retailers) ſuch as Lying and Cheating are too great Cauſes of bringing an Odium on the Name of Trades-men *by Perſons of Honour and Gentility: But if it be conſidered on the other hand, that ſuch Immoralities are not Eſſential to Trade, and that there are many (and I hope the greater part) that may and do grow Rich by Traffick, who make Juſtice their Rule, and their Word a ſtrict Obligation; then ſuch Objections againſt Trades men will ſeem vain and frivolous: But 'tis the Foreign Trade or Merchandizing that I would chiefly here perſwade ſome of our Perſons of Quality to have a due Eſteem of. Other Arts or Myſteries they uſually value, according to the Profoundneſs and Excellency of their Nature, or elſe to the Advantages uſually attending them; for both which, the Employment of a Merchant is as valuable as that of a Lawyer, Phyſician, or any other Profeſſion whatſoever: For if the neceſſary Perfections and Qualities of a truly accompliſh'd Merchant be conſidered with reſpect to his Natural, Moral, and acquired Parts, it will place him (in the Opinion of the Judicious) far above Contempt.*

For ſuch a Merchant, as to his Natural parts, muſt have a quick Apprehenſion, a ſolid Judgment, and a ſound Conſtitution of Body; his Apprehenſion to capacitate him for the underſtanding all that great Myſtery of his Honourable Calling; his Judgment to ſecure him from being eaſily deceived and impoſed on by thoſe with whom he has Dealings; and a good Conſtitution and ſoundneſs of Body, that he may do variety of Buſineſs in different places in a ſhort time.

His Morals *muſt likewiſe be conſpicuouſly good; his* Fortitude *ſuch as gives him an undaunted courageous Spirit to adventure his Eſtate at Sea, notwithſtanding all Dangers; and alſo to correſpond*

and discourse not only with Foreigners and Barbarians, but with Princes and States-men; and (in short) to insist on his Rights from all Persons in all places whatsoever. And as his Fortitude *must be great, so his* Prudence *sets Bounds thereto, that it neither Degenerates into Impudence nor Fool-hardiness; for 'tis by this that a just Ballance and due Poize is kept in all his Actions; this is the Pole star that directs him how to steer in his many novel and momental Concerns; by this he first fixes on the most probable and and secure way of enriching himself, and then prosecutes his Designs by the most proper Methods; This teaches him how to manage all his Domestick concerns according to the various Mutations of things abroad; and 'tis his Prudence, whereby his Importations, Exportations, Buying, Selling, Exchanging by Bills, Bartering, Accompts; and all his Dealings are so ordered and carried on, as tend not only to his own, but the Interest of Trade in general. And as his* Prudence *makes him act wisely, so his* Justice *makes him act honestly: This restrains him from affirming a Commodity to be good, when 'tis bad; or Weight and Measure when 'tis deficient; or if he does so through ignorance of such defects, he scruples not to make a proportionable abatement. This also makes him punctual to his Word in all his Affairs, which procures and encreaseth his Credit; his Credit augmenteth the Bulk of his Trade, and that makes him grow Rich. This Merchant is not only accounted an honest Man by his Neighbours (which is sufficient for other Men, for his Character is as well known in Foreign Parts, as his Name or the Commodities he deals in; and by acquiring the Epithete of a* Just *Man, he can carry on as great a Trade as he that wants that Name can do with treble his Stock. And if we consider his Temperance, Gravity, and Affability, they are such as improve his spacious Capacity and Intellects; the first makes him able to perform the most intricate part of his Business at any time, whenever it occurs; the second makes him suited to, and become his high and honourable Employment; and the third makes him of an easie Access, gains him Love and Affection, and makes all that know him delight to deal with him.*

And

And as this Merchant is thus Qualified with reſpect to his Natural Parts and Morals, ſo his Acquired parts *are ſuch as fit him for the practice of that great and copious Undertaking to perform it with eaſe and ſatisfaction, and make him a fit Correſpondent or Companion for the moſt Noble or Judicious. To inſtance in ſome of the neceſſary Accompliſhments which properly denominate him a Merchant: He underſtands not only the Language and Cuſtoms (with reſpect to Trade) of the place where he reſides, but alſo thoſe of ſuch Parts of the World where he has any conſiderable Traffick: He writes a fair and legible Hand, and the Matter in a good Style, for the ſatisfaction not only of Foreigners, who may not well underſtand his Dialect, but of Judges and Magiſtrates (in caſe of Conteſt) who may be unacquainted with the Myſteries of Merchantile Concerns: He is likewiſe well verſed in Accompts, whereby he can do his buſineſs the ſhorteſt and ſureſt way. And in* Book-keeping, *by Debtor and Creditor, which informs him with Eaſe and Certainty how Matters ſtand at any time with reſpect to* Men, Money *or* Merchantize, *and to Profit and Loſs, whether he goes forward or backward, grows Rich or Poor: He is likewiſe a good Proficient in Mathematical Learning, as in* Geometry, *by which he knows how to meaſure Board and Timber or other things relating to his Trade; as Gauging Wine and Oyl Veſſels,* &c. *In Navigation, whereby he knows the Diſtance and Rombs leading to the moſt noted Ports or Places of Trade which are of uſe to him in Diſcourſe and Agreements with Maſters of Ships,* &c. *In* Geography *thereby to know the Situation of the moſt remarkable places of Traffick, what Commodities they produce, and alſo the Cuſtomes, Subſidies and Impoſitions paid upon Exportation or Importation, their manner of Buying and Selling, with the value of their Coins, Weights and Meaſures. Add to all this the clear Notions he has of the great Myſteries of Exchange; the Reaſon of its Riſing and Falling, the Laws and Cuſtoms uſed in Drawing, Accepting, Endorſing, and Proteſting Bills of Exchange, and the Quantity made up for Sale, Quality and Uſe of the moſt material and beſt Commodities, together with the Policy of Trade, as the Intereſt of all Countries, with reſpect to all Commodities,* i. e. *which*

are most prone for, or are to be prohibited Exportation or Importation in this or that Country, and many other things; which should I particularize, it would swell this Epistle beyond a due proportion to the subsequent Treatise; all which a compleat Merchant must necessarily be acquainted with, in order to the Qualifying him for the judicious Performance of his own Business, and that of his Country in a Court of Merchants. So that we may safely conclude with the fore-cited Ingenious Author, That of this study, as well as others, it may be said, There is Infinity in it, none, though of the largest Intellects and Experience, being able to fathom its utmost Depth.

And now, Courteous Reader, though the following Treatise will fall short of Qualifying thee as above-mentioned, yet I doubt not, since the former Impressions have found such favourable Reception, but this will do the like; And if the Heads aboveſaid may (by being here barely mentioned) Induce the Pen of some more able Proficient to furnish us with something Corresponding thereto, it would, no doubt, be an Undertaking extreamly tending to the Honour and Advantage of the Trading-part of this Kingdom; who (if this Edition finds due encouragement) may expect hereafter to be accommodated with such other Additions, as may render this Treatise of such practical Use, as will leave no room for Exception. In the mean time, I must assure the Reader, that I have proceeded in Composing the following Pages in the most Familiar, Rational and Copious Method that I am capable of, having endeavoured throughout the whole, to prevent Errour, and to Explain those things most clearly, which others have either but transiently touched, or wholly omitted; and therefore doubt not thy kind Acceptance of an Offering, so sincerely intending thy Proficiency, by thy

Well wisher in the Progress of Study,

E. Hatton.

THE

INDEX.

A

Addition of whole Numbers — Page 5 *and* 6
Addition, the Reason thereof — 19
Addition, the Proof thereof — 24
Addition of Vulgar Fractions, with the Reason of the Rule — 74
Addition of Decimals, with the Reason of the Rule — 86
Alphabet, the Form of — 195
Assignation Money, how entred in the Ledger — 157
Accompts proper in Foreign Trade, how booked — 160
Abatement made by a Factor for Defect in Goods, how booked — 162
Accompts in Company, how entred in the Ledger — 166
Accompts, directions for Posting thereof — 196
Arabia, *the Commodities it produceth, chief Towns of Trade,* &c. 218
Africa, *the Commodities it produceth, chief Towns of Trade,* &c. 219
America, *its Product and chief Towns of Trade,* &c. — 220
Arbitration Bond, the Form of one — 240, 241

B

Ballance of Trade, what — 135
Barrel, how much of several things — 17
Book keeping, the method thereof — 156, *&c.*
Ballance, the Form of the Accompt thereof — 193
Ballance, directions how to perform it — 198
Ballance, how converted to an Inventory — 194
Bills of Exchange, Maxims observable in drawing, &c. *thereof* — 201
Breakers, the several kinds thereof — 212
Breakers, how to act, and the Law concerning them — 213, 257
Barter, how to work Questions therein — 115
Bills of Exchange, a Table for the ready casting them up — 132, *&c.*
Book of Factories, its use — 155
Bills drawn on a Factor, how booked by the Employer, as Drawer — 162
Bills drawn on one Factor by another, how entred by the Employer — 163
Bills of Debt, of Exchange, of Lading, of Parcels, &c. *the Form thereof* 243
Bankrupts; See the Dictionary

C.

Coin, English, a Table thereof — 8
Coin, how to reduce Foreign into English — 49
Compound Fractions, what — 66

Com-

Compound Fractions, how reduced to Simple — 69
Charges of Merchandize, how to keep an Accompt thereof — 179
Caſh-Book, the Form of one — 180
Cloſing Accounts, how done — 198
Commiſſion to Factors, the Nature thereof — 208
Commiſſion of Bankrupt, what — Vid. *Dictionary.*
Commiſſioners of Bankrupt, the Law concerning them — Vid. *Dictionary.*
Commodities produced by all Countries, chief Towns of Trade, &c. 215
Coin, how to calculate the Par thereof — 128
Courſe of Exchange, what, and an Explanat. of the Table thereof 129, 130
Courſe of Exchange, how to keep it near the Par — 136
Company Accompts, how entred in the Ledger — 166
Compound Intereſt, what, and how calculated — 139
Compoſition-Money, how booked in the Ledger — 157
China, *its Commodities, chief Towns of Trade,* &c. — 219
Charter-party, the form of one — 246
Current Engliſh Coin the value, weight fineneſs, &c. *thereof* — 120

D.

Dozen, a Table thereof — 11
Dozen, how added — 18
Diviſion of Whole Numbers — 31
Diviſion, the Explanation of the manner of Working — 38
Diviſion, the Reaſon and Demonſtration thereof — 40
Double direct Proportion, how to ſtate Queſtions therein — 60
Double, direct Proportion, how to work Queſtions therein — 61
Diviſion of Vulgar Fractions, and the Reaſon of the Rule — 78
Decimal Fractions, what — 80
Decimal Fractions, how to find the value by Inſpection, with the Reaſon of the Rule — 85
Diviſion of Decimals — 88
Decimals, a Rule to know what Cyphers to add in dividing — 89
Debts received or paid, how entred in the Ledger — 156
Duty of Factors — 209

E.

Even Number of Shillings being the price of any thing, how to work for the ſame by Practice — 92, &c.
England, *its Product and chief Towns of Trade,* &c. — 215
Exchange-Broakers, what — 212
Exchange of Coin, what — 117
Exchange, the Subject thereof — 118
Exchange, Reaſons for its riſing and falling — 135
Equation of Time of Payments, how work'd — 145

Eaſt-

East-India, *the Commodities it produceth, chief Towns of Trade*, &c. 219

F.

Fractions (Vulgar) — 65
Fractions how to reduce them to a common Denominator with the Reason of the Rule — 68
Fractions, how reduced to their lowest terms, and the Reason of the Rule — 69, 70
Fractions (Compound) how reduced to Simple, with the Reason of the Rule — 70
Fractions, how to find their value, and the Reason of the Rule — 70, 71
Fractions, how to reduce them from a higher to a lower Denomination, with the Reason of the Rule — 73
Fractions, how reduced from a lower to a higher Denomination, with the Reason of the Rule — 72
Fractions (Decimal) how reduced, added, &c. — 80
Factor, what, their Power, Duty, Commission, Provision, &c. — 208, *&c.*
France, *its Product, chief Towns of Trade*, &c. — 216
Flanders, *its Product*, &c. *see* Low Countries — 216
Foreign Weight and Measure compared with English — 125
Fellowship, how work'd — 149
Factors, how to enter Accounts in their Ledger — 164, 165
Foreign Post Letters, the rates outward and inward — 221, 222

G.

Great Gross, what bought and sold thereby — 16
Great Gross, &c. *how added* — 18
Gain and Loss, how to work Questions therein — 146
Goods received or delivered in Lieu of a Debt, how Book'd — 159
Germany, *its Product, chief Towns of Trade*, &c. — 217
Georgia, *its Product, chief Towns of Trade*, &c. — 219
General Release, the Form of one — 249

H.

Hundred of 120, *what reckon'd thereby* — 15
Hundred of fivescore, what reckon'd thereby — 16
Hay, how much a Truss by Law — 16
House-Expences, how to place to accrmpt and post them into the Cash-Book, &c. — 179

I.

Iron and Shot, how weigh'd — 16
Improper Fractions, how reduced to whole or mixt Numbers with the Reason of the Rule — 67
Inventory, how entred in the Wast-Book — 173
Inventory, how entred in the Journal — 176

Journal, the Form of one — 176
Ireland, *its Product, chief Towns of Trade, &c.* — 216
Interest of Coin in most Countries, &c. — 137
Interest in England, *the Statute for it* — 137, *&c*
Journal, Instructions concerning it — 152
Interest paid, and the Principal continued, how booked — 157
Interest received, how booked in the Ledger — 157
Insurance Money received or paid, how entred in the Ledger — 160, 161
Italy, *the Commodities it produceth, chief Towns of Trade, &c.* — 217
Invoyce, the Form of one — 249

L.

Litteral Numbers, the value thereof — 4
Ledger, how kept, an example of one — 181
Low Countries, *their Product, chief Towns of Trade, &c* — 216
Loss and Gain, how to work Questions therein — 146
Ledger, Instructions concerning it — 152
Letters Out and Into England, *the Rates by Post* — 221
Letters of Credit and of License, the Form thereof — 251

M.

Measure, Wine, &c. Tables thereof — 9, *&c*
Measure, how added — 18
Motion, a Table thereof — 12
Multiplication of Whole Numbers — 27
Multiplication, the Reason and Demonstration thereof — 30
Multiplication, how to prove it — 41
Mixt Numbers, how reduced to improper Fractions, and the Reason — 66, 67
Multiplication of Vulgar Fractions, with the Reason of the Rule — 77
Multiplication of Decimals, with the Reason of the Rule — 87
Money, its Use, Fineness, Value, &c. — 118, *&c.*
Money, how to calculate the Par thereof — 128
Money received for Debt, how entred in the Cash Book or Ledger — 156
Money taken or delivered at Interest, how entred — 156
Money paid or received (upon Rebate) before due, how entred — 158
Money paid for part of a Ship, how entred — 160
Money remitted by Bill from a Factor, how entred by the Receiver — 163

N.

Notation and Numeration of { *Whole Numbers* — 1, 2; *Vulgar Fractions* — 65; *Decimal Fractions* — 80 }
Netherlands, *their Product, chief Towns of Trade, &c.* — 216
Note for Payment of Money — 253
Neat proceed of Goods, what — 211

O.

One Shilling being the Price of the Integer, how to work by Practice 92

P.

Proportion, the several Rules thereof 13, &c.
Proportion, how to prove the several Rules 64
Proportion, the Demonstration of the Single Rule 62
Practice, or Rules for the brief casting up the Value of Goods 91
Price of the Pounder being 1 s. how to work 92
Price 2 s. how to work, and the Reason of the Rule 92
Price, any even Number of Shillings, how to work, and the Reason 92
Price being any odd number of Shillings, how to work 94
Price being any Number of Pence, how to work 95
Posting Accompts, how done 196
Protest of Bills, how and wherefore made 203
Power of Factors 208
Provision, how much given to Factors in most Countries 211
Par or Value of Foreign Coin in English 124
Proper Accompts in Foreign Trade, how booked 160
Poland, *Its Product, chief Towns of Trade,* &c. 217
Policie of Insurance, the Form of one 253
Protest of a Bill, the Form of one 255

R.

Reduction of Money ascending and descending 43, 46
Reduction of Dollars into English *Coin* 49
Reduction of Flemish *Money into* English 49
Reduction of French, Spanish, Italian *and* Portugal *Coin into* English 50
Reduction of Vulgar and Decimal Fractions 66, 80
Rising and falling the Course of Exchange, Reasons for it 135
Russia *or* Muscovy, *its Product, chief Towns of Trade,* &c. 218
Receipts, the Form of sundry sorts 256

S.

Salt and Sea-Coal, how measured 17
Substraction two ways 21, 23
Substraction, the Reason and Proof thereof 23, 24
Simple Fraction, what 66
Substraction of Vulgar and Decimal Fractions 76, 87
Scotland, *its chief Towns of Trade,* &c. 216
Swedeland, *its Product and chief Towns of Trade,* &c. 217
Spain *and* Portugal, *their Product, chief Towns of Trade,* &c. 217
Statute concerning Interest at 6 per Cent 137
Simple Interest, what and how Calculated 139

Time,

T.

Time, a Table thereof, and how added — 11, 18
Thousand, what bought and sold thereby — 15
Timber, how much a Tun, or a Load — 17
Two shillings being the price of any thing, how to work by Practice 97
Trade, Brokers, what — 212
Tare, what, and how to make allowance for it — 103
Trett, what, and how deducted — 103, 114
Turkey, *what Commodities it produceth and its chief Towns of Trade* 218
Tartary, *its Product and chief Towns of Trade* — 219

U.

Use of the Tables of Weight and Measure — 12
Use of Money — 137
Usance, what — 201
Umpirage, the Form of one — 257
Value of Foreign Coin — 124

W.

Weight, Averdupoize, Troy, Apothecaries — 8
Wool-Weight — 9
Weight, how added — 18
Waste-Book, the Form of one — 173
Weight (Foreign) its value in English — 125
Waste-Book, Instructions concerning it — 151
Wares bought or sold for ready Money, how booked — 156
Wares bought or sold at Time, how booked — 157
Wares bought or sold, part for ready Money, and part at time, how booked 158
Wares bought or sold in Barter, how booked — 159
Wares bought or sold, part for ready Money, and part Wares, how booked 160
Wares shipp'd off, how booked in the Ledger by the Owner — 160
Wares consigned to a Factor, being sold, how entred by the Employer 161
Wares lost at Sea, how entred in your Ledger — 162
Wares shipp'd by one Factor to another, how entred by the Employer 162
Wares received from a Factor in return for others sent him formerly, how booked by the Receives — 163

An Advertisement concerning the Contents or Index to this Book.

That Chapter 14 (which is the Dictionary) is not included in the Index above; for the Words in that Chapter running in Alphabetical order are Indexes to themselves, and may sooner be found there than elsewhere. But if the Reader look for a word there, and cannot find it, let him look in the Index, and if it is in the Book he will there not miss of it.

Numeration

Teacheth to read or write any Number set downe or named

The Table

						1	Vnites	1									
					2	1	Tenns	1	2								
				3	2	1	Hundreds	1	2	3							
			4	3	2	1	Thousands	1	2	3	4						
		5	4	3	2	1	XThousands	1	2	3	4	5					
	6	5	4	3	2	1	CThousands	1	2	3	4	5	6				
7	6	5	4	3	2	1	Millions	1	2	3	4	5	6	7			
8	7	6	5	4	3	2	1	XMillions	1	2	3	4	5	6	7	8	
9	8	7	6	5	4	3	2	1	CMillions	1	2	3	4	5	6	7	8	9

Notation of Whole Numbers.

IN Order to the Right underſtanding how any Number is to be read or written, there are theſe Four Things to be conſidered:

1. The Characters by which all Numbers are expreſſed.
2. The Species or Kinds of Numbers.
3. The Order or Place: And,
4. The Multitude or Value ſignified by any Number.

Firſt, The Characters by which all Numbers (how great ſoever) are expreſſed in Writing, are theſe Ten: *Viz.*

1, 2, 3, 4, 5, 6, 7, 8, 9, and (o) Cypher.

Secondly, The Species or Kinds of Numbers are Three: *Viz.*

Firſt, Digits.
Second, Articles.
Third, Mixt Numbers.

1. A Digit is any of the Nine fore-mentioned Figures ſingly expreſſed: *Viz.* 1, 2, 3, 4, 5, 6, 7, 8, 9; which poſſeſs but One Degree or Place.
2. An Article is any of the Nine Digits, with a Cypher or Cyphers, placed to the Right-hand: As, 10, 100, 300, 5000, 6000, *&c.*
3. A Mixt Number is compoſed of Digits, or Cyphers and Digits promiſcuouſly placed together: As, 12, 24, 96, 112, 102, 1769, *&c.*

Thirdly, The Order of the Places of Numbers is reckoned from the Right-hand, toward the Left; as in the Table foregoing; Toward the Left-hand, 1 is in the Firſt Place, 2 in the Second, 3 in the Third, *&c.* But the Order of Reading Numbers is from the Left-hand, toward the Right, as ſhall be ſhewed by and by.

The Denomination of the Places are reckoned as followeth, and as in the foregoing Table.

The Order of Places.	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
The Denomination of the Places.	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9
	C *Millions of Millions*, &c.	X *Millions of Millions.*	*Millions of Millions.*	C *Thousands of Millions.*	X *of Thousands of Millions.*	*Thousands of Millions.*	C *Millions.*	X *Millions.*	*Millions.*	C *Thousands.*	X *Thousands.*	*Thousands.*	*Hundreds.*	*Tens.*	*Units.*

Fourthly, Having premiſed this, it will be eaſie to read any Number, obſerving only theſe Two Things: *Viz.*

1. The Place any Digit poſſeſſeth.
2. The Value of that Digit.

Firſt, By the preceding Table it is plain, That the Firſt place, toward the Right-hand, is the place of Units; the Second, the place of Tens; the Third, the place of Hundreds, *&c.*

Second,

Second, Therefore ſuppoſe the Digit 9 ſtands in the Units place, the Value of it is 9; that is, 9 Units: If it ſtands in the Second place, it is 9 Tens; that is, Ninety: If in the Third, or Hundreds place, 'tis 9 Hundred, *&c.* So we will ſuppoſe that the Digit 7 ſtands in the Fifteenth place, which (by the foregoing Table) is Hundreds of Millions of Millions; and the Value of that Digit, poſſeſſing that place, being (7:) Admitting therefore, that all the places toward the Right-hand of the ſaid (7) were ſupplied by Cyphers, the Value of the Number would be Seven Hundred Millions of Millions; And, in like manner, the 15 Figures in the foregoing Table are thus read:

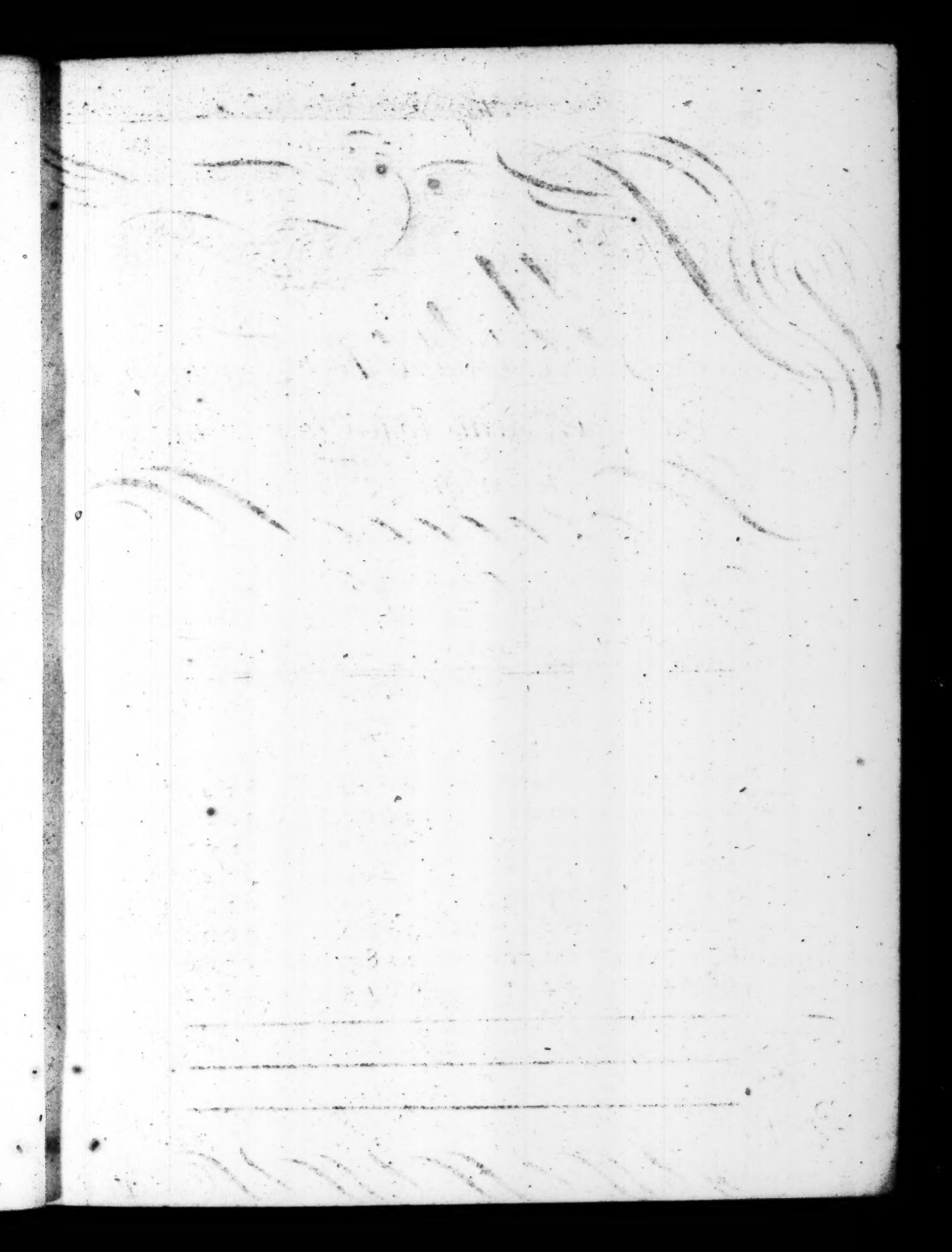
Seven Hundred Sixty Five Millions of Millions,
Four Hundred Thirty Two Thouſand Millions,
One Hundred Twenty Three Millions,
Four Hundred Fifty Six Thouſand,
Seven Hundred Eighty Nine.

And by the ſame Rules are all other Numbers expreſſed: Where *Note*, That any of the places is Ten times the Value of the place next it, toward the Right-hand; As 111111111, is 1000000000, 100000000, 10000000, 1000000, 100000, 10000, 1000, 100, 10, 1; That is, One Thouſand Millions, is Ten times One Hundred Millions, which is Ten times Ten Millions, which is Ten times One Million, which is Ten times One Hundred Thouſand, which is Ten times Ten Thouſand, which is Ten times One Thouſand, which is Ten times One Hundred, which is Ten times Ten, which is Ten times One; and the whole Number being read, is One Thouſand One Hundred and Eleven Millions, One Hundred and Eleven Thouſand, One Hundred and Eleven.

The Value of the Latin, or Literal Numbers, *are as follows.*

I	1	XI	11	CC	200
II	2	XX	20	CCC	300
III	3	XXX	30	CCCC	400
IIII or IV	4	XL	40	D	500
V	5	L	50	DC	600
VI	6	LX	60	DCC	700
VII	7	LXX	70	DCCC	800
VIII	8	LXXX	80	DCCCC or CM	900
IX	9	XC	90	M	1000
X	10	C	100	MDCXCVII	1697

Addition



Addition Teacheth to add sev.l sums togeather to make them one Total

Pounds	Yards	Gallons	Quarts
1270	2734	3546	2795
1021	3946	5737	1501
2370	6542	7845	7160
8426	5763	6721	5072
5603	9708	9654	8540
7206	1246	4060	3026
4570	2090	7241	1867
3872	3427	5426	9742
2106	7602	3213	6381
7285	9841	9762	7690
1707	1056	2187	3786
2834	5407	8615	4502
Total			
Proof			

ADdition is either Simple or Compound.

First, Simple Addition is when Numbers are to be added that have but one Name or Denomination, as Pounds to Pounds, Feet to Feet, *&c.*

Secondly, Compound Addition is when Numbers of divers Denominations are added together; as, Pounds, Ounces, and Drams, to Pounds, Ounces, *&c.* in both which Caſes, theſe two Rules are to be conſidered.

The *First* is for the right placing the Numbers to be added.
The *Second* is for the adding together thoſe Numbers after they are ſo placed.

1. *The Rule for placing the Numbers that are to be added.*

Obſerve to write the Units place of all your lower Numbers, under the like place of the Number above; Tens place under Tens, Hundreds under Hundreds, *&c.* (as in the Example foregoing, and thoſe that follow:) And if the Numbers to be added are of divers Denominations, you are to place all the lower Numbers under thoſe of the ſame Denomination above; as if you add 17*s.* to 2*l.* 7*s.* you muſt place the Numbers thus:

l.		*s.*
2	:	07.
0	:	17.

2. *The Rule for adding Numbers of one Name together, (let the Denomination be what it will,) is:*

Summ up every Series or lineal Row of Figures, beginning at the undermoſt Figure toward the Right-hand, and place the Digit above Ten or Tens in that firſt Rank under the Line as followeth, and carry the ſaid Ten or Tens to the next Rank toward the Left-hand, calling them ſo many Units, (for they are no more of that next Rank) and add all the Reſt of the Ranks as you have done the Firſt: But if there is nothing above even Tens when you have added any Rank together,

together, then place a Cypher under that Rank, proceeding to carry the Tens, as is before directed: As in the following Example.

		l.
Admit I have Owing to me for	Holland Cloth	3794
	Thread	896
	Cambrick	6285
	Latten Wyre	3745
	Sugar	2392
	Nutmegs	3058
	Total ---	20170

To know what Summ I am Creditor by, or what is owing me in all, I ſumm up the Particulars, beginning with 8 at the Angle, toward the Right-hand of the lowermoſt Line, as was before directed; ſaying, 8 and 2 is 10, and 5 is 15, and 5 is 20, and 6 is 26, and 4 is 30: put a Cypher under the Line, and carry 3 to the next Rank, toward the Left-hand; ſaying, 3 and 5 is 8, and 9 is 17, and 4 is 21, and 8 is 29, and 9 is 38, and 9 is 47: put the 7 under the Line, and carry 4 to the next Rank; ſaying, 4 and 3 is 7, and 7 is 14, and 2 is 16, and 8 is 24, and 7 is 31: put the 1 under the Line, and carry the 3 to the next Rank; ſaying, 3 and 3 is 6, and 2 is 8, and 3 is a 11, and 6 is 17, and 3 is 20: which put all down, becauſe you have no more Ranks; ſo will you find the Total to be 20170 *l.* And after the like Manner are any other Numbers of one Denomination added.

§. 2. *For adding Numbers of divers Denominations together, Obſerve this Rule:*

Having the Numbers placed, as is before directed, and as in the Examples following; Conſider how many Units, of the leaſt Denomination in the Numbers given to be added, make a Unit of the next ſuperior Denomination; and how many Units ſoever you find of the next greater Denomination contained in the whole Rank, or Series, of the next leſſer Denomination, ſo many muſt you carry to the ſaid Rank of greater Denomination: And if any thing remain over and above a Unit or Units of the next higher Denomination, ſuch Overplus is to be placed under the Line.

To

Addition of Money

d	s
12	1
24	2
36	3
48	4
60	5
72	6
84	7
96	8
108	9
120	10
132	11
144	12

li	s	d
270	16	08 ½
954	15	10
106	01	11 ¼
378	10	09
452	19	00 ¾
670	12	07
201	00	06 ½
815	01	05
720	17	04 ¼
147	18	03
706	14	02 ¾
908	03	10

li	s	d
397	17	10 ¼
254	10	07
632	15	11
197	16	02 ½
540	17	06
325	19	08
697	03	00
402	00	05 ¾
354	04	03
976	14	09
214	11	01 ½
107	13	04

Total

Proof

To inſtance in the foregoing Example of Pounds, Shillings and Pence, toward the Left-hand: Where note, by the way, That

$\frac{1}{4}$ is one Farthing, or a Quarter of any thing.
$\frac{1}{2}$ is one Half-penny, or two Quarters of any thing.
$\frac{3}{4}$ is three Farthings, or three Quarters of any thing.

So in the Example aforeſaid, 3 Farthings and 1 is 4, and 2 is 6, and 3 is 9, and 1 is 10, and 2 is 12 Farthings or 3 Pence: which carry to the Pence; ſaying, 3 Pence and 10 Pence is 13 Pence, and 2 is 15, and 3 is 18, and 4 is 22, and 5 is 27, and 6 is 33, and 7 is 40, and 9 is 49, and 11 is 60, and 10 is 70, and 8 is 78 Pence; that is, *6 s. 6 d.* (as you may ſee by the Table of Pence on Page 1 of this Chapter:) Put the 6 *d.* under the Line, and carry the *6 s.* to the ſhillings; ſaying 6 and 3 is 9, and 4 (taking but Units place of the ſhillings) is 13, and 8 is 21, and 7 is 28, and 1 is 29, and 2 is 31, and 9 is 40, and 1 is 41, and 5 is 46, and 6 is 52: put the 2 ſhillings under the Line, and carry the 5 to the Tens place of ſhillings; ſaying, 5 and 8 (Ten ſhillings) is 13: put the odd Ten ſhillings under the Line, and carry 12 Ten ſhillings to the pounds, calling them 6 pounds (by taking half of them,) ſaying, 6 and 8 is 14, and ſo forward, as in the laſt Example of one Denomination; ſo you will find the Summ to be 6333 *l: 12 s: 6 d:* By the ſame Rule and Method may you find the Total of any other Number of Pounds, Shillings, and Pence: But,

Note, That becauſe in Quarters of Hundreds, Ounces, *&c.* the Difficulty of proceding in that Method would be great; therefore your beſt way will be when you add Ounces in Averdupoize-weight, *&c.* to make a point or prick at every 16; ſo will you avoid charging the Memory, and may with eaſe carry the ſaid points or pricks to the pounds; each point being 1 pound: A few Examples will make it plain, which you have after the Tables.

§. 3. *Of*

§. 3. *Of Engliſh Coin*, &c.

TABLE 1. *Of Engliſh Coin.*

4 Farthings is -- 1 Penny.
12 Pence ——— 1 Shill.
20 Shillings ——— 1 Pound.

In 1 Pound Sterling, are { 960 Farthings. 240 Pence. 80, 3 Pences. 60 Groats.

TABLE 2. *Of Troy-Weight.*

32 Natural Grains of Wheat, or 24 Artificial Grains ------ } 1 Penny-weight.
20 Penny-weight ------- 1 Ounce.
12 Ounces ——— 1 Pound.

In a Pound Troy, are { 5760 Grains. 240 Pen-wt. 12 Ounces.

TABLE 3. *Of Averdupoize-Weight.*

4 Qrs of a Dram --- 1 Dram.
16 Drams ——— 1 Ounce.
16 Ounces ——— 1 Pound. *l.*
28 Pounds ——— 1 Qr of 112 the *C.*
20 Hundred ——— 1 Ton.
19½ Hundred ——— 1 Ton of Lead.

In 1 Ton, are { 573440 Drams. 35840 Ounces. 2240 Pounds. 20 Hundred of 112 *l.* to the Hundred.

Note, That 56 *l.* is one Half, and 84 *l.* three Quarters of 112 *l.* which is the Merchant's Hundred for moſt Commodities.

TABLE 4. *Of Apothecaries Weight.*

20 Grains --- 1 Scruple, mark'd --- ℈.
3 Scruples - 1 Dram ——— ʒ.
8 Drams --- 1 Ounce ——— ℥.
12 Ounces -- 1 Pound ——— ℔.

In a Pound Troy, are { 5760 Grains. 288 Scruples. 96 Drams. 12 Ounces.

T A-

TABLE 5. *Of Sheeps-Wooll Weight.*

7 Pound	1 Clove.	In a Laſt of Wooll, are,	12 Sacks.
2 Cloves	1 Stone.		24 Weys.
2 Stone	1 Tod.		156 Tod.
6½ Tod	1 Wey.		312 Stone.
2 Weys	1 Sack.		624 Cloves.
12 Sacks	1 Laſt.		4368 Pounds.

According to the Standard of the Exchequer by the 31 *Edw.* 3. *Ch.* 8. 13 *R.* 2. *Ch.* 9. 26 Stone of 14 *l.* each, is 1 Sack or 364 Pound.

TABLE 6. *Of Wine-Meaſure.*

4 Quarts, or 231 ſolid Inches, is	1 Gallon.	In 1 Ton, are,	6 Tierce or 252 Gall.
42 Gallons	1 Tierce.		4 Hogs-head.
1½ Tierce, or 63 Gallons.	1 Hogs-head.		2 Pipes or Butts.
2 Hogs-heads	1 Pipe or Butt.		
2 Pipes	1 Ton.		

Note, That Honey and Oil are meaſured by this Meaſure.

TABLE 7. *Of Beer-Meaſure.*

2 Pints	1 Quart.	In a Barrel are,	288 Pints.
2 Quarts	1 Pottle.		144 Quarts.
2 Pottles or 282 ſolid Inches, is	1 Gallon.		72 Pottles.
			36 Gallons or 10152 SolidInches.
9 Gallons	1 Firkin.		4 Firkins.
2 Firkins	1 Kilderkin.		2 Kilderkins.
2 Kilderkins	1 Barrel.		

Note, That 1½ Barrel, or 54 Gallons is a Hogs-head of Beer.

TABLE 8. *Of Ale-Measure.*

2 Pints	1 Quart.	In a Barrel are,	256 Pints.
2 Quarts	1 Pottle.		128 Quarts.
2 Pottles or 282 solid Inches, is	1 Gallon.		64 Pottles.
			32 Gallons, or
			9024 Solid Inches.
8 Gallons	1 Firkin of Ale, Herring or Soap.		4 Firkins.
			2 Kilkerkins.
2 Firkins	1 Kilderkin.		
2 Kilderkins	1 Barrel.		

TABLE 9. *Of Dry-Measure.*

2 Pints	1 Quart.	In one Last are,	5120 Pints.
2 Quarts	1 Pottle.		2560 Quarts.
2 Pottles	1 Gallon.		1280 Pottles.
2 Gallons	1 Peck.		640 Gallons.
4 Pecks	1 Bushel Corn-Measure.		320 Pecks.
5 Pecks	1 Bushel Water-Measure.		80 Bushels.
8 Bushels	1 Quarter.		10 Quarters
4 Quarters	1 Chaldron.		2 Weys.
5 Quarters	1 Wey.		
2 Weys	1 Last.		

Note, That 36 Bushels is a Chaldern of Sea-Coal, by the 16, 17 *Car.* 2. *Chap.* 2.

TABLE 10. *Of Long-Measure.*

3 Barley-Corns	1 Inch.	In a Mile, are	190080 Barley-Corns.
12 Inches	1 Foot.		63360 Inches.
3 Foot or 16 Nails	1 Yard.		5280 Feet.
45 Inches	1 Ell English.		1760 Yards.
27 Inches	1 Ell Flemish.		320 Polls or Perches.
2 Yards	1 Fathom.		8 Furlongs.
5 Yards and ½	1 Poll or Perch.		
40 Perches	1 Furlong.		
8 Furlongs	1 Engl. Mile.		

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TABLE 11. *Of Square or Superficial-Measure.*

16 Quarter of an Inch — 1 Inch.
144 Inches — 1 Foot.
9 Foot — 1 Yard.
30 Yards and ½ — 1 Poll.
40 Poll long, & 1 broad — 1 Rod of Land, or Qr. of an Acre.
4 Square Rods — 1 Acre.
649 Acres — 1 Square Mile.

In a Sq. Mile, are
40144896 00 Squ. Inch.
27878400 Feet.
3097600 Yards.
102400 Polls,
2560 Roods.
640 Acres.

TABLE 12. *Of Dozen.*

12 Pieces or things is 1 Dozen.
12 Dozen — 1 Small Gross.
12 Sm. Gross — 1 Great Gross.

In a great Gross are,
12 Small Gross.
144 Dozen.
1728 Pieces or things

TABLE 13. *Of Time.*

60″ (Second) — 1′ Minute.
60 Minutes — 1 Hour.
24 Hours — 1 Natural Day.
7 Days — 1 Week.
4 Weeks — 1 Month.
13 Months, 1 Day and 6 Hours — 1 Solar Year.

In a Year are,
31557600 Seconds.
525960 Minutes.
8766 Hours.
365 Days, & 6 Hours.

But *note*, That from the time the Sun leaveth 1 Tropick, to the time it returns to that Tropick, is 365 Days, 5 Hours, 49 Minutes, 4 Seconds, and 21 Thirds.

TABLE 14. *Of Motion.*

60" (Seconds) maketh	—— 1	Minute.
60′ (Min.) or Miles or 4′ of Time	—— 1	Degree.
30 Degrees	—— 1	Sign of the Zodiack.
3 Signs or 90°	—— 1	Quadrant.
4 Quadrants or 360°	—— 1	Circle of the Sphere.

§. 4. *The Use of the foregoing Tables.*

YOU have for each of the foregoing Denominations of Money, Weight, Measure, *&c.* 2 sorts of Tables, that toward the Left hand, shewing how many Units of an inferiour Denomination are contain'd in a Unit of the next superiour Denomination, by which you may know how to add or substract any Numbers of those Denominations. The other Tables toward the Right hand, shew how many Units of any of the lower Denominations is contained in a Unit of the highest Denomination, which is very usefull for the speedy reducing of any thing from one Denomination to another.

The first Table is of *English* Coin, the least Denomination of which is a Farthing, and the greatest of our real Pieces a Crown or 5 *s.* 4 whereof make 1 Pound or 20 *s.* concerning which Money you have a farther Account in Exchange of Coin.

The second Table is of Troy Weight, by which is weighed Bread, Corn, Jewels, Gold, Silver, Amber, and Electuaries; and all Measures for Wet and Dry are taken from this Weight. By the Statutes of 51 *H.* 3. and 13 *Edw.* 1. it was Enacted, That one Peny should contain in Weight 32 Natural Grains of Wheat taken out of the middle of the Ear, or 24 Artificial Grains, as in the Table of Troy Weight.

The third Table is of Averdupoize Weight, 16 Ounces or 1 Pound of which is equal to 14 *oun.* 12 *dw.* Troy. By this Weight is weighed all manner of things that have waste, as Physical and Grocery Drugs, Rozen, Wax, Pitch, Tarr, Tallow, Butter, Cheese, Soap, Hemp, Flax, Flesh, Iron, Steel, Tinn, Copper, Lead,

Lead, Allum, Copperas, *&c.* 112 *l.* of which is the Hundred; and in adding, for every 16 Drams carry one to the Ounces, for every 16 Ounces carry 1 to the Pounds, for every 28 in the Pounds place carry 1 to the Qr. of Hundreds, for every 4 in the Qr. of Hundreds carry 1 to the Hundreds. Note, That 56 *oun. Averd.* is but 51 *oun.* Troy.

The fourth Table is of Apothecaries Weights, by which they compound their Medicines, tho' they buy and ſell their Drugs by the Averdupoize Weight. In adding this Weight, for every 20 in the Grains place, carry 1 to the Scruples, for every 3 Scruples, carry 1 to the Drams, for every 8 of theſe Drams, carry one to the Ounce, for every 12 Ounces, carry 1 to the Pounds place.

The fifth Table is the Weight by which Sheeps Wooll is weighed; in adding of which Weight you are for every 7 pound to carry 1 to the Cloves place, for every 2 Cloves to carry 1 Stone, for every 13 Stone carry 1 to the Weys place, *&c.*

The ſixth Table is of Wine Meaſure, where, in adding, you muſt for every 4 Quarts, carry one to the Gallons, for every 63 Gallons carry 1 to the Hogs-heads place, for every 2 Hogs-heads, carry 1 to the Pipes place, and for every 2 Pipes, carry 1 to the Tuns. Note, That the Wine Gallon contains but 231 ſoild Inches by the Standard of the Exchequer, which is leſs than the Ale or Beer Gallon. By which Gallon of 231 Inches, all other Liquids, except Ale and Beer are meaſured by the 12 *Ch.* 2. And note, That a Tun of Wine weighs 17 *C.* Averdupoize, and 1 Pint is 1 *l.* $0\frac{1}{2}$ *oun.* Troy.

The ſeventh Table is of Beer Meaſure, containing 282 ſoild Inches to the Gallon, by which Strong, Mild, and Small Beers are meaſured; the Denominations uſually added by Exciſe Officers, *&c.* are for every 9 Gallons, carry 1 to the Firkins, for every 4 Firkins, carry 1 to the Barrels, 36 Gallons being 1 Barrel by the 12 of *Char.* 2.

The eighth Table is of Ale Meaſure, containing as the Beer 282 ſoild Inches, but the Barrel is leſs than the Beer Barrel, by 1128 ſoild Inches, or 4 Gallons: ſo that for every 8 Gallons, carry 1 to the Firkins, and for every 4 Firkins, carry 1 to the Barrels, 32 Gallons being 1 Barrel by 12 *Ch.* 2.

The ninth Table is of dry Meaſure, for Corn, Salt, Sea-Coal, *&c.* the Gallon (by the Standard) of this Meaſure is $272\frac{1}{4}$ ſoild Inches.

And

And in adding, you are for every 2 Gallons or ½ Pecks, to carry one to the Pecks, for every 4 Pecks carry 1 to the Bushels, and for every 8 Bushels carry 1 to the Quarters, which is the highest Denomination of Corn Measure.

The tenth Table is of Long Measure, in which no notice is taken of Breadth, as of Heights, Depths, Distances, Length of Cloth, Roads, *&c.* and in adding this kind of Measure, you are for every 3 Feet or 4 Quarters of a Yard to carry 1 to the Yards, for every 11 half Yards carry 1 to the Perches, for every 40 Perches carry 1 to the Furlongs, and for every 8 furlongs carry 1 to the Miles. But note, That tho' 5½ Yards is a Poll or Perch, according to the Statute, yet in some Countries they have 7, 7½, and 8 Yards to the Poll called customary Measure. Tho' 160 Square Perches, each 5½ Yards is an Acre by the 24 *H.* 8. *Ch.* 8.

The eleventh Table is of Superficial Measure, which is that wherein Length and Breadth is consider'd, as in measuring Board, Glass, Pavements. Wainscot, Tiling, Plaistering, Flooring, *&c.* where for every 144 Inches, you must carry 1 Foot, for every 9 Foot 1 Yard; or in Land, for every 40 Square Perches carry 1 to the Rods, for every 4 Rods carry 1 to the Acres. And note, That the solid Foot is 12 Inches long, 12 broad, and 12 thick, or 1728 solid Inches, used in measuring Timber, Stone, *&c.*

The twelfth Table is of Dozen, usefull in adding things computed thereby, which are very numerous, of which, such wherein the great Gross is used, you have following. In adding hereof, you must for every 12 carry 1 to the Dozens place, for every 12 Dozen 1 to the Small Gross, for every 12 Small Gross 1 to the Great Gross.

The thirteenth Table is of Time; of which some say, How can 365 Days and 6 Hours be found in a Year, since to multiply 52 Weeks by 7 Days, produceth but 364 Days? But if such Queriſt looks into his Almanack (wherein no doubt but he believes all contain'd) he will find 52 Weeks and 1 day in a Year, and every fourth Year, 52 Weeks, 2 Days; or 52 Weeks, 1 Day and 6 Hours every Year one with another, according to the English Account of computing Time.

The fourteenth is a Table of Motion, whereby the Motion of the Heavenly Bodies, as the Sun, Moon, *&c.* (or of the Earth, according to *Copernicus* his System of the World) is computed, of which

which I need ſay nothing more, it being more uſed by the Aſtronomer than Merchant.

Tables of Quantity in Whole-Sale Trade.

Note, That Things in a Whole-Sale way Bought and Sold by the 1000, are

- Tacks.
- Chair-Nails and Tenter-Hooks.
- Brick-Stones.
- *Flanders*, Paving and Pan-Tyles.
- Cuttle-Bones.
- Pack and Sail-Needles.
- Oranges and Lemmons.
- Pomgranates.
- Gooſe-Quills.
- Copper Spangles.
- Tazels.
- Thimbles.
- Trunnels.
- Billets.
- Ox-Bones.
- Leaves of Horn for Lantherns.
- Ox-Horns.
- Hoops for Barrels.
- Roe Buck, and Stags Tips.
- Pieces of Box-wood for Combs.
- Lamperns.
- Yards of Cloth-Liſt.
- Squerril Skins.
- Slate and Hilling Stones.

Pins and ſmall Needles by the 1000 Dozen.

---

120 in Number is the Hundred of

- Balks of all Sorts.
- Barlings.
- Barrel Boards.
- Pipe Boards.
- Bomſpars.
- Bowſtaves.
- Cant-Spars.
- Capravens.
- Herring.
- Deal Boards.
- Nails.
- Eggs.
- Codfiſh.
- Colefiſh.
- Lingfiſh.
- Newlandfiſh.
- Stockfiſh all Sorts.
- Heading for Pikes.
- Ells of Canvas (except Strip'd, Tufted, or Quilted.)
- Coney, Stag, and Lamb } Skins.
- Oars.
- Hogs-heads Staves.
- Ells of Drilling, Pack-Duck. *Hamborough*, *Slecia*, *Iriſh*, *Muſcovy*, *Weſtphalia*, *Hanover*, &c. } Linnen Cloath.

Of

Of Clap-Board, the Great Hundred is 24 Small, or 2880, and the Thouſand Herrings is 1200.

Tables of Quantity in Whole-Sale Trades.

By the Great Groſs, containing 12 Small Groſs, or 144 Dozen, are bought and ſold in a Whole-Sale way of Trade.

- Buttons: Mettal, Glaſs, Thread, Silk, Handkercher, and Hair, Cap-hooks, Playing Cards.
- Caſes: Comb and Spectacle.
- Combs: Lightwood and Box.
- Chef-men.
- Points: Thread and Silk.
- Tobacco Pipes.

Things of which five Score is reckoned a Hundred Weight.

- Croſsbow-Thread.
- Ginger.
- Horſe Tails with Hair.
- Indigo.
- Thrums.
- Capers.
- China Roots.
- Manufactures: Braſs and Lattin.

Of Hay the North Country Stone is 14 *l.* 4 of which, or 56 *l.* is 1 Truſs, by 2 *William* and *Mary*, *Chap.* 8. or of new Hay 60 *l.* to the Truſs in *June* and *Auguſt*, on Forfeit of 18 *s. per* Truſs; and the Load is 36 Truſs of 56 *l.* old Hay.

Of Iron and Shot, 14 *l.* is 1 Stone. 2 Stone 1 Quarter of a Hundred, *&c.* as in Averdupoize Weight.

In *Eſſex* they weigh Cheeſe and Butter by the Clove of 8 Pounds, and 31 to the Wey. But in *Suffolk* they allow 42 Cloves, or 336 Pounds to the Wey.

The

The Barrel of ſundry Commodities, is as follows:

Anchoveys	30	Pound.
double Barrel	60	Pound.
Nuts or Apples	3	Buſhel.
Oatmeal, Potaſh or Barillia	200	Pound.
Salmon or Eels	42	Gall.
White or black Plates	300	Plates.
Candles	10	Dozen Pound.
Figs	0 *C.* 3 *q.* 14 *l.* to 2½	*C.*

Raiſins	1 *C.* Weight.
Oil	31½ Gallons.
Span. Tobacco	2 to 3 *C.*
Gunpowd.	1 *C.* Weight.
Soap	240 *l.*
Butter	224 *l.*
Herring	32 Gallons.

Of Timber, 43 ſolid Feet make 1 Tun ——

600 Foot of 1
400 Foot of 1½
300 Foot of 2
200 Foot of 3
150 Foot of 4
} Inch Plank, make 1 Load.

Where Sea-Coal and Salt are meaſured by the Corn-Meaſure, they are heaped, or elſe there are 5 ſtriked Pecks to the Buſhel; 36 ſuch Buſhels in a Chaldern of Sea-Coal, and 21 Chaldern to the Score.

I had here thought to have inſerted the Length, Breadth, and Weight of Woollen Cloth, but the Statute 4 *Jac.* 1. for Aſcertaining the ſame, being obſolete, and not much regarded, I have omitted the ſame.

§. 5. *Examples of adding Numbers of divers Denominations.*

Example I.

Of Troy-Weight.

lb.	ou.	dw.	gr.
416	08	15	20
842	01	10	05
26	11	04	17
22	06	19	23
Total —— 1308	04	10	17

Example II.

Averdupoize-Weight.

Ton.	C.	Qr.	lb.	ou.	dr.
147	16	3	14	15	15
119	03	1	04	01	00
7	19	3	27	10	08
1	10	2	10	13	12
276	10	3	01	09	03

Example III.

Of Wine-Measure.

Ton.	Buts.	H-ds.	Gal.
31	01	01	38
10	01	00	10
5	00	01	60
7	01	01	09
Tot. 55	01	00	54

Example IV.

Beer-Measure.

Bar.	Fir.	Gal.
31	03	08
17	02	01
12	01	05
72	03	06
134	03	02

Example V.

Ale-Measure.

Bar.	Fir.	Gal.
71	03	07
18	01	01
28	00	02
13	02	06
132	00	00

Example VI.

Of Time.

Days.	Hours.	′	″
34	12	40	48
420	5	10	20
510	23	59	50
21	10	00	11
Total --- 987	3	51	9

Example VII.

Of Dozen.

Great Groſs.	Small Groſs.	Do-zen.	Things or Pieces.
56	10	06	11
148	09	11	03
26	11	01	09
533	02	08	10
765	10	04	09

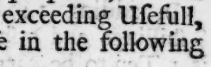
By

By theſe few Examples, with the help of the foregoing Tables, the Learner will be enabled to add any Numbers propoſed, of what Denomination ſoever; which Tables he will find exceeding Uſefull, not only in this Rule of Addition, but likewiſe in the following Parts of Arithmetick and Merchant's Accompts.

§. 6. *The Reaſon and Demonſtration of Addition.*

BY *Euclid*, Lib. 1. Axiom 9. of his *Elements*, the Whole is equal to all its Parts taken together.

So the Right line *(gh)* is equal to the 3 lines *ab*, *cd*, and *ef*:



For the 3 lines *ab*, *cd*, and *ef*, being all the Parts contained in the Whole line *gh*, and the line *ab*, added to *cd*, and that Summ to *ef*, making up the line *gh*; therefore the line *gh*, is equal to the Summ of the Parts, *viz.* to *ab*, more *cd*, more *ef*, taken together:

Or in Numbers I ſay, that 15, 16, and 42, make up 73; which cannot be denied, ſince there are no more Units in 73, but 15, 16, and 42; nor no more Units in 15, 16 and 42, than 73; therefore the Number 73, muſt be equal to the Numbers 15, 16, and 42.

Parts { 15, 16, 42 — Total-73

2. The Reaſonableneſs of the Rules given for adding Numbers together, will thus appear from what was ſaid in Numeration, of the places of Numbers: For in Addition every degree or place muſt be added to the like degree or place; So that in the Unit's place, if there is one or two Tens, it is plain that thoſe one or two Tens muſt be added to the Numbers in Ten's place, becauſe they are of the ſame Denomination; ſo if in a Rank of Figures (in Ten's place) I find 2 or 3 times Ten, for every 10 in Ten's place, I have One Hundred to carry to the Hundreds place; for 10 times 10 is One Hundred, as was obſerved before; Hundreds muſt be added to the Hundreds, becauſe 'tis of the ſame degree or place.

For Example:

	l.	*s.*	
In adding 149*l.* 17*s.* to 18*l.* 8*s.*: I say,	149	17	} Parts.
8 shillings and 7 shillings is 15 shillings, which	18	8	}
is 1 Ten to be carried to the place of Ten shil-			
lings; which one Ten being added to the other	168	5	Total.

Ten, makes two Ten's, or 20 shillings, which being one Unit of the next Denomination, *viz.* Pounds: I therefore add the 1 pound to the Unit's place of pounds; saying 1 and 8 is 9, and 9 is 18 pounds; which 8 being Units of Pounds, I place it in the Units of Pounds place of the Summ, and carry the 10 pound to the 10 pounds place, of which Denomination it is one: So 1 Ten and 1 Ten is 2 Ten's, and 4 Ten's is 6 Ten's; which being less than 10 Ten's, or 100, I have nothing to carry to the Hundred's place; so I place 6 in Ten's place of the Summ, and put the 100 to the Left-hand in Hundreds place of the Summ: Which being observed, any Summ may be added, without carrying any thing from one degree or place to another, (which is done purely to save trouble:) For instance;

Let it be required to add,	2976.	The Summ of the Figures in Unit's place is--15
	4132	Of Ten's place is----------140
	8647	Of Hundred's place is----------1600
		And of Thousand's place is----14000
	15755	The Total of which is----15755
		Equal to the first Total.

Because Addition and Substraction do prove each other, I shall shew the Proof of Addition after Substraction; which followeth.

Sub-

Chap: 3.

Substraction Teachet

to take a Lesser Number from a Greater a

to know ye Remainder

Recd	7582094	457	09	07
Paid	6129762	126	16	10
Remains	1452332	330	12	08
Proof	7582094	457	09	07
Borr	5469387	602	11	08
Paid	2672052	74	19	10
Rest				
Proof				
Dr	1020060	894	00	01
Cr	40709	372	14	09
Ballance				
Proof				

Subſtraction is either,

1 Of Numbers of one Denomination: Or,
2. Of Divers Denominations, and is the Converſe of Addition.

§. 1. *When you have placed the Numbers in Order, the leſſer under the greater, as is uſual, (unleſs it may, as ſometimes it does (by having the leſſer Number uppermoſt) ſave the trouble of removing a Number) this is the Rule.*

Rule.] Having drawn a Line under the Numbers given, begin with the Digit ſtanding in Unit's place, of the Number to be ſubſtracted, and take it from the Figure poſſeſſing the like place of the greater Number; placing the Exceſs or Difference under the line, doing in like manner with all the reſt. But if the Figure in the leſſer Number be greater than the Figure poſſeſſing the like place in the greater Number; then you muſt add 10 to the ſaid leſſer Figure, and ſo proceed to take the ſaid greater Number from the Summ, placing the Remainer under the line; and becauſe the 10 borrowed was ſuppoſed to be taken from the next Figure toward the Left-hand, therefore add one to that Figure, and ſo proceed to ſubſtract, as in the Former, placing the Exceſs under the line, as before.

Example.] Admit I have laid out Caſh, the Summ of 4579 pounds, out of 6947 pounds, which I had in Bank; what Summ remains yet in my hands?

	l.
	6947
	4579
Remains	2368

The Numbers being placed, take 9 in the Unit's place of the lower line from 7, in the like place in the upper line; but becauſe you cannot, borrow 10 from the 70, which ſtands in the Ten's place, and add to the 7 which ſtands in the upper line making it 17; ſo 9 from 17 will leave 8; which put under the line, and ſay, 1 (that is 1 Ten) I borrowed and 7 is 8, from 4 and 10 you borrowed as before, that is from 14, leaves 6; which place under the line, ſaying, 1 you borrowed and 5 is 6, from 9 leaves 3, and 4 from 6 leaves 2; which being put under the line, there will appear to remain in my hands 2368 pounds.

In like manner, in the firſt Example foregoing, if you take 6129762 Hundred from 7582094 there will remain 1452332; for

for 2 from 4, and there reſts 2; 6 from 9, reſts 3; 7 from 10, (which I borrow'd) reſts 3; 1 borrowed and 9 is 10, from 12 reſts 2; 1 borrowed and 2 is 3, from 8 reſts 5; 1 from 5, reſts 4, and 6 from 7, and there reſts 1; ſo the Difference between the Numbers given is 1452332.

§. 2. *How to ſubſtract Numbers of divers Denominations.*

In the firſt Example foregoing, of Pounds, Shillings, Pence and Farthings, you have 126 *l.* 16 *s.* 10½ *d.* to deduct from 457 *l.* 9 *s.* 7¼ *d.* To perform which, begin with the Farthings; ſaying, 2 from 1 you cannot; but 2 from 4 farthings (or 1 peny, which you borrow from the pence) and the 1 farthing in the upper line, that is from 5, and the remainder is 3 farthings, which put under the line, as you ſee; ſaying, 1 borrow'd and 10 pence is 11 pence, from 7 pence you can't, but from 19 (borrowing 1 ſhilling or 12 pence from the ſhillings, and adding to the 7) and the remainder is 8 pence; which put under the line, and ſay, 1 ſhilling you borrow'd and 16 ſhillings is 17, from 29 ſhillings (borrowing 20 ſhillings or 1 pound from the pounds, and adding to the 9 in the upper line) and there reſts 12 ſhillings, which place under the line; And ſay, 1 pound you borrowed and 6 (in the Pound's place) is 7, from 7, leaveth (0), put (0) under the Unit's place of pounds, and ſay, 2 from 5, and there reſts 3: and 1 from 4 and there remains 3: ſo the Remainder is, 330 *l.* 12 *s.* 8¼ *d.*

More Examples follow.

	C.	*Qrs.*	℔.
Bought Cotton-Wooll	121	1	20
Sold out	92	3	27
Remains	28	1	21

	℔.	℥.	*p.w.*	*gr.*
Bought Silver, Weight	19	00	09	14

	℔.	℥.	*p.w.*	*gr.*					
Sold out at one time	4	10	16	00	In all	17	08	00	16
At another time	12	09	04	16					
Reſteth unſold						1	04	08	22

§. 3. *A*

§. 3. *A Second Way of Subſtraction.*

I think it a much better way, when any thing is borrowed, to add to the Figure in the Number from whence you ſubſtract, in caſe 'tis too little: To take what is borrowed from the Figure ſtanding next toward the Left-hand of the Figure that is too little, and ſuppoſe the Figure from whence you borrowed to be ſo much leſs: So will you never need to pay what was borrow'd, as is before taught.

EXAMPLE.

Here, inſtead of ſaying 4 from 11 reſts 7, and 1 borrowed and 8 is 9, from 12 reſts 3: It will be much leſs trouble to ſuppoſe the 10 borrowed to be actually taken from the 2, as it really is, and ſo the reſt of the Figures; ſo muſt you ſay, 4 from 11 reſts 7, 8 from 11 reſts 3, 1 from 8 reſts 7, 9 from 17 reſts 8, 2 from 2 reſts 0. This way of Subſtraction is much more natural and reaſonable than the former, or common way; but the Learner may uſe which he pleaſeth; though I doubt not, but were this way as much practiſed as the former, it would be found much better.

From	37921
Take	29184
Difference	8737

§. 4. *The Reaſon and Demonſtration of Subſtraction.*

From the Axiom aforeſaid of the whole, being equal to all its parts taken together, we may demonſtrate (or undeniably prove) the Premiſes: For the Number from whence we make Subſtraction, is the whole; and the Number to be ſubſtracted is part of that whole. Now if the part be taken from the whole, what remains will be the true difference between the part and the whole; for the whole containeth no more parts than the Summ made of the part taken away; and the part remaining, and the part taken from the whole, is only ſo much leſs than the whole, as the part remaining; Therefore the part remaining is the true Exceſs or Difference between the whole and the part taken from it.

As to the Reaſon of the Rule for Subſtraction, I need ſay no more than what is above concerning the ſecond way of Subſtraction, and what

what was ſaid in the Reaſon of Addition, and what follows in the proving Subſtraction.

§. 5. *The Proof of Subſtraction two ways.*

The Demonſtration foregoing is ſufficient to prove the Truth of Subſtraction: But becauſe there was no Example, take theſe following.

The Summ of the Subtrahend and Remainer is equal to the Number given, from whence Subſtraction is to be made: For inſtance:

From 56742
Take 39752 } Add.
Remains 16990 }

Proof 56742 the Summ, equal to the Number, from whence Subſtraction is to be made.

Or thus by Subſtraction:

From the whole 56742
Take the part 39752

Remains 16990 Which deduct from the whole,

And there reſts the part given to be deducted, } 39752 for Proof.

§. 6. *The Proof of Addition two ways.*

After you have taken the Summ of the Numbers given to be added, you may prove the Truth of the Summ by ſeparating the ſaid Numbers into two parts with a line, and the Summ of thoſe parts will (if there is no Error) be equal to the Aggregate or Summ of all the Numbers given.

EXAM-

EXAMPLE.

l.	*s.*		*l.*	*s.*
5762	4			
397	12	The Summ of these parts	7182	17
1023	01			
8942	13			
1600	08	The Summ of these parts	10543	01
The Total 17725	18			
		The Total of these is equal to the first Total.	17725	18 Proof.

Or thus by Subſtraction:

	l.	*s.*
The total Summ of the Numbers given is —	17725	18
from which deduct the firſt part —	5762	4
Remains —	11963	14
from which deduct the 2d part of the Total —	397	12
Remains —	11566	02
from which deduct the 3d part —	1023	01
Remains —	10543	01
from which deduct the 4th Number —	8942	13
And there remains —	1600	08
from which deduct the fifth Number —	1600	08
And the Remainer is —	0000	00

Which, being Cyphers, proves the Work.

Multiplication Table

3 Times	3	9
	4	12
	5	15
	6	18
	7	21
	8	24
	9	27
4 Times	4	16
	5	20
	6	24
	7	28
	8	32
	9	36
5 Times	5	25
	6	30
	7	35
	8	40
	9	45
6 Times	6	36
	7	42
	8	48
	9	54
7 Times	7	49
	8	56
	9	63
8 Times	8	64
	9	72
9 Times	9	81
	10	90
	11	99
12 Times	2	24
	3	36
	4	48
	5	60
	6	72
	7	84
	8	96
	9	108
	10	120
	11	132
	12	144

Multiplication is a Rule by which any Number may be ſo increaſed by multiplying it by another, as to produce a third Number, which ſhall bear ſuch reaſon or proportion to either of the Numbers given, as the other does to a Unit.

The two Numbers given to be multiplied, are for ſhortneſs termed the Factors: Or,

The one (commonly the greater) is called the Multiplicand, and is that Number given to be multiplied.

The other is called the Multiplier, and is that Number by which the Multiplicand is multiplied.

The third Number, which is that produced by multiplying the two given Numbers together, is called the Product, or in Geometry it is called the Rectangle.

By this Rule is compendiouſly performed many Additions; As, 4 times 80 is 320, which would require three Additions to know; as you ſee in the Margent.

Multiplicand 80 } Factors
Multiplier 4 }

Product 320

80 }
80 } Add.
80 }
80 }

320 Summ.

Multiplication is either Simple or Compound.

Simple when the Factors are both Digits: And,

Compound when the Factors are one or both mixt Numbers or Articles.

[Before you go any farther, you muſt get the foregoing Tables by heart: which, ſuppoſing you have done, take the following Rules for working any Summ propounded.]

Caſe 1.] When the Product of each Figure in the Multiplicand, by the Multiplier, is leſs that Ten, how to multiply by a Digit.

Rule.] Having placed the Factors, Units under Units, as in the Margent, multiply each Figure in the Multiplicand by the Multiplier, and place the ſeveral Products under the line, beginning with the Figure in Units place of the Multiplicand.

Example.] What comes 3214 pound of Tea to, at 2 pound *per* pound?

Say, 2 times 4 is 8, which put under a line, as in the Margent; ſaying, 2 times 1 is 2, 2 times 2 is 4, and 2 times 3 is 6: ſo the Anſwer is 6428 *l.*

3214
2
Product *l.* 6428 Anſw.

Caſe 2.] When the Product of any of the Figures in the Multiplicand, by another in the Multiplier, is 10, or any Number of Ten's.

Rule.] Put down in the General Product the Number of Units, that the Product of any 2 Figures, in the Factors, are above 10, or any Number of Tens, and carry the ſaid 10 or Tens to the Product of the next Figure, and ſo proceed till all the Figures in the Multiplicand are multiplied by the Multiplier.

Example.] What is the Price of 3484 Sacks of Cotton, at 9 pounds *per* Sack?

3484 } Factors.
9 }

According to the Rule, ſay, 9 times 4 is 36: put the 6 under the line, and carry 3; ſaying 9 times 8 is 72, and 3 I carry is 75: put down the 5, and carry 7; ſaying 9 times 4 is 36, and 7 is 43: put down 3, and carry 4; ſaying, 9 times 3 is 27, and 4 I carry is 31; which put all down: ſo will you find the Anſ. 31356 *l.* as *per* Margent.

Anſ. 31356 *l.* Product.

Caſe 3.] When the Factors are each above 10, how to find the Product.

Rule.] Multiply the Figures in the Multiplicand by that ſtanding in the Unit's place of the Multiplier, as before; and in like manner multiply the Multiplicand by the Figure ſtanding in the Ten's place of the Multiplier: but you muſt place the Unit's place of the ſecond Product under Ten's place of the firſt, and the other degrees in order; Tens under Hundreds, Hundreds under Thouſands of the firſt Product: which done, add the Products together, and the Aggregate or Summ is the General Product required.

Example.] What is the price of 594 Ton of Iron, at 18 pounds *per* Ton?

594 } Factors.
18 }

Note, that if there had been 3 Figures in the Multiplier, when you were to multiply by that in Hundred's place; the firſt Figure of the Product muſt have been placed under the 9 in the lower of theſe Products: The following Examples will make it plain.

4752
594
Anſ. *l.* 10692 Product.

Caſe 4.]

Case 4.] When you have any Number of Cyphers toward the Right-hand of the Multiplicand and Multiplier, or either of them; Multiply by the ſignificant Figures, and put the Cyphers toward the Right-hand of the Product.

Example 1.] Admit the Earth's Circumference is 360 Degrees, and that one Degree is 60 Miles, how many Miles is it round the Earth?

360 Degrees } Factors.
60 Miles }

Anſwer 21600 Product.

Example 2.] If in a Mile is 1000 Paces, how many Paces in 1000 Miles?

1000 }
1000 } Factors.

Anſwer 1000000 Product.

In this and the like Examples where the Multiplier is only a Unit with Cyphers; place thoſe Cyphers to the Right-hand of the Multiplicand, and you have the true Product; for 1 neither augmenteth nor diminſheth any Number by Multiplication nor Diviſion, and is therefore by ſome ſaid to be no Number: but 1 and 1 being 2, proves the contrary.

Case 5.] When Cyphers poſſeſs any other place than next the Right-hand of the Multiplier.

Rule.] When Cyphers ſtand in the Middle of the Multiplier, you muſt place the Unit's place of the Product made of the Figure ſtanding next the Cyphers toward the Left-hand, ſo many places forward as there are Cyphers in the ſaid Middle, ſupplying their places with as many points; ſo will you not need to make ſo many lines of Cyphers, as many ignorantly do.

Example.] Multiply 3942300 } Factors.
by 720020 }

78846
78846
275961

2838534846000 Product.

The

§. 2. *The Reaſon and Demonſtration of Multiplication.*

If two Lines (or Numbers) be given, and one of them be divided into any Number of Parts; the Product made of the two whole Lines (or Numbers) is equal to the Product made of the whole Line (or Number) and the ſeveral Parts of that divided. *Vid.* Euclid's *Elem. Prop.* 1. *Lib.* 2.

To inſtance in Numbers: If 346 were to be multiplied by 122, which 122 ſuppoſe divided into 3 parts, *viz.* 100, 20 and 2: I ſay, the Product made of 346 by 122, is equal to the Summ of the Products, *viz.* 346 by 100, 346 by 20, and 346 by 2; as followeth.

346	346	346
100	20	2

1*ſt.* Product = 34600 — 6920 = 2*d.* Product. — 692 = 3*d.* Product.
2*d.* Product = 6920
3*d.* Product = 692

Summ = 42212 The Product, equal to the Product of 346 by 122

692
692
346

viz. 42212

For there being no more Units in 42212, than in the Products 34600, 6920, and 692; nor any more Units contained in the Products 34600, 6920, and 692, but what is contained in the Product 42212; therefore the Products 34600, 6920, and 692, are equal to the Product 42212.

From hence alſo is the reaſon of placing the Units of the ſecond Product, under Tens of the firſt; Units of the third under Tens of the ſecond, *&c.* as in the Example; where 324 by 3, is 972; 324 by 20 (2 being in Ten's place) is 6480; and 324 by 100 (1 being in Hundred's place) is 32400; and if the Cyphers be omitted, (which 'tis moſt proper to do, ſince they make no Number greater by Addition) the Numbers will ſtand as in ordinary Summs in this Rule: ſee the Margent.

	324
	123
	972
	6480
	32400
The Summ	39852

Divi-

Division Teacheth

to Divide or Seperate any Number or Quantity into as many Parts as you please

In this Rule

Observe 4 Things Viz.t THE Dividend Divisor Quotient Remain.r

THE Dividend is the Number given to be divided.

The Diviſor is the Number by which the Dividend is divided.

The Quotient is the Number of times that the Diviſor is contained in the Dividend.

The Remainer is the Number that may remain of the Dividend after the Diviſor is had, as many times in it as is expreſſed in the Quotient: From whence it follows, that the Remainer muſt be always leſs than the Diviſor, or otherwiſe the Diviſor might be had once more in it.

As Multiplication is a compendious way of Addition, ſo Diviſion is the Work of many Subſtraction; for if 12 be divided by 4, the Quotient would be 3; for 4 may be taken 3 times out of 12.

Dividend

Diviſor 4) 12 (3 Quotient.

0 Remainer.

1ſt. From 12 take 4 remains 8

2d. Take 4 remains 4

3d. Take 4 remains 0

There are ſeveral ways that I could eaſily ſhew for the dividing one Number by another; but I ſhall only inſert one, which is plainer than Cancelling, and ſhorter than the other ways commonly practiſed; and is therefore, in my Opinion, the beſt.

Caſe 1.] To divide any Number by a Diviſor, conſiſting but of one place.

Let it be required to divide 37642 by 7.

Having made a crooked (or any other) Line at each end of the Dividend, to ſeparate it from the Diviſor and Quotient, make a point or prick under 7 in the Dividend, (not under 3, becauſe you cannot take the Diviſor from the 3,) and ſay, how often is 7 (the Diviſor)

Diviſor) contained in 37, the firſt Branch toward the Left-hand of the Dividend? the Anſwer is 5 times; which (5) put in the Quotient, and multiply the Diviſor thereby; ſaying, 5 times 7 is 35; which deduct from the ſaid 37, and put the Remainer (which is 2) under a Line; as in the Example:

Then make a prick under the 6 (as a diſtinguiſhing Mark, that no Figure may be brought down twice) and place it to the Right-hand the Remainer (2) and ask how often 7 is contained in 26? the Anſwer is 3 times; which put in the Quotient, as before, multiplying the Diviſor, thereby: As, 3 times 7 is 21, from 26, and there remains (5;) which put under the 6, drawing a Line between the 26 and the 5: Then make a prick under the next Figure, toward the Right-hand, in the Dividend; *viz.* under (4,) and place it to the Right-hand the Remainer 5, making it 54, and ask how often the Diviſor (7) can be had in 54? the Anſwer is 7 times, which put in the Quotient, and ſay, 7 times 7 is 49, from 54, and there reſts (5;) which put under a Line, as before. Laſtly, make a prick under the 2 in the Dividend, and place it to the Right-hand the Remainer 5, which makes 52, and ask how often the Diviſor (7) can be had in 52? the Anſwer is 7 times: which put in the Quotient, and multiply the Diviſor thereby; ſaying, 7 times 7 is 49; which deduct from the 52, and the Remainer is 3; and you have no more Figures in the Dividend. So the Work is finiſhed; and I find that 5377, is one ſeventh part of 37642.

7)	37642	(5377	
	26		
	54		
	52		
	3		Remains.

The Rules for the laſt Operation are thus contracted.

How often 7 in { 37, 26, 54, 52 } Anſwer { 5, 3, 7, 7 } times 7 is { 35, 21, 49, 49 } from { 37, 26, 54, 52 } Reſts { 2, 5, 5, 3 } To which, bringing down the next Figure, makes { 26, 54, 52 }

Exam-

Example 2.] By the foregoing Method is the Number following divided, *viz.* 917640 by 9.

Dividend

Diviſor 9) 917640 (101960 Quotient.

17

86

54

(00) Remains.

Note, that when the Diviſor cannot be had in any Part of the Dividend, that is brought down under a line: In ſuch caſe you are to put a Cypher in the Quotient, and bring down the next Figure in the Dividend; as in the Example 9 cannot be had in (1,) therefore (0) is put in the Quotient, and 7 brought down, which makes the 1 to be 17, *&c.*

Caſe 2.] To divide any Number by a Diviſor, conſiſting of 2, 3 or 4 places.

Rule.] It many times happeneth that in dividing a Summ by 2, 3, *&c.* Figures; That though you can have the firſt Figure of the Diviſor in the Dividend, yet you cannot have the reſt of the Figures of the Diviſor in the like Number of Figures of the Dividend; as if 316 be divided by 182, in this caſe 1 (the firſt of the Diviſor) can be had 3 times in 3, (the firſt Figure in the Dividend, but the reſt of the Figures in the Diviſor; *viz.* 82, cannot be had 3 times in 16 (the reſt of the Figures in the Dividend,) therefore you muſt make trial whether the Diviſor can be had one time leſs in the Dividend: As here; ſee if 182 can be had 2 times in 316, by multiplying (in your Mind, or on ſome piece of Waſt-paper) 182 by 2; which Product, if you find yet more than the Dividend 316, (as in this Example you will, and conſequently cannot be deducted from it,) then take 182 but 1 time in 316, and put 1 in the Quotient. Take good notice of this, for it is the only difficult thing in Diviſion; and that it may appear plain, take the Example following.

Let it be required to divide 75231 by 24?

To perform this:

1. Make a point under 5, because you can deduct 24 from 75, otherwise the point must have been made under the third place.

2. Ask how often 2 can be had in 7? the Answer is 3 times.

3. Before you put the 3 in the Quotient, make trial in your mind, if the product of 24 (the Divisor) by 3, do not exceed 75, which you will find it does not.

4. Therefore put 3 in the Quotient, and say, 3 times 4 (the Unit's place of the Divisor) is 12; which deduct from the 5, and 10 that you borrow (for you must always borrow so many Tens, as that the said Product of the Figure in the Quotient and Divisor may be deducted,) that is, from 15, and the Remainer is 3; which put under a line, and carry the 1 Ten you borrowed in your mind; saying, 3 times 2 (in the Divisor) is 6, and 1 you borrowed is 7; from the 7 in the Dividend, and the Remainer is (0).

5. To the Remainer (3) bring down the next Figure in the Dividend, which is 2.

6. Ask how often 2 can be had in 3? or how often 24 (your Divisor) can be had in 32; the Answer is 1.

7. Put 1 in the Quotient.

8. Multiply 24 (the Divisor) by 1; saying, 1 time 4 is 4 from 12 (borrowing 10) and there rests 8; which put under the line, saying, 1 time 2 is 2, and 1 borrowed is 3, from 3, and the Remainer is (0).

```
24) 75231 (3134
    ....
    ------
Remains 32 Brought down.
    .
    ------
Remains 83 Brought down.
    .
    ------
Remains 111 Brought down.
    .
    ------
    15 Remainer.
```

9. To the Remainer 8, bring down the next Figure in the Dividend, which is 3, (always making a point under the Figure you bring under the line for the reason aforesaid) so have you 83; enquire therefore,

10. How often 2 the first Figure in the Divisor toward the Left-hand can be had in 8, the Answer is 4 times: but if you make trial, you

you will find the Product of 24 by 4 to exceed 83; ſo that you can have but 24, 3 times in 83.

11. Put 3 therefore in the Quotient, as you ſee in the Example.

12. Multiply 24 the Diviſor by 3; ſaying, 3 times 4 is 12, from 13 (borrowing 10 to add to the 3, laſt brought down) and there remains 1: which put under the line, as you ſee; ſaying 3 times 2 is 6, and 1 borrowed is 7; from 8, and there remains 1: which being in the Ten's place makes Eleven.

13. To this 11 bring down the laſt Figure from the Left-hand in the Dividend, *viz.* (1) and you have 111.

14. Enquire how often 24 (the Diviſor) can be had in 111, or how often two in 11, (becauſe 111 is 1 place more than 24,) the Anſwer is but 4 times; for if you take it 5 times, you cannot deduct 5 times 24 from 111.

15. Multiply 24 the Diviſor by the Figure you put in the Quotient, which is by 4; ſaying, 4 times 4 is 16, from 21, borrowing 2 Tens to add to the 1 in Unit's place) and there reſts 5; and carry 2, and 4 times 2 in the Diviſor is 8, and 2 borrowed is 10, from 11 the laſt Remainer, and there remains 15: So the Work being finiſhed, I find that 23 is contained in 75231, 3134 times; which I have made ſo plain (proceeding ſtep by ſtep) that any one, though of ordinary Capacity, may underſtand it; and by it any other of the like Nature, though the Diviſor conſiſts of never ſo many Figures: Take one other Example of this Caſe.

Let it be required to divide 319462 by 548?

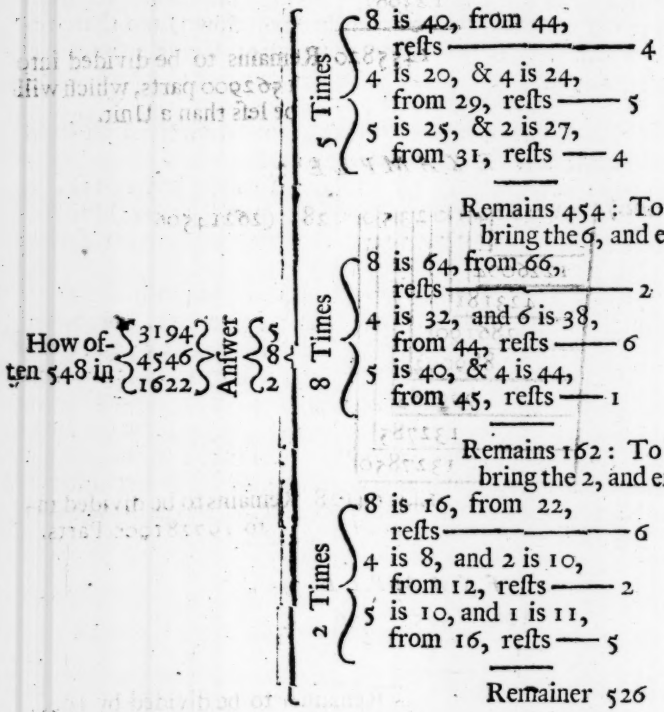
548) 319462 (582

4546

1622

526 Remainer.

By the Rules foregoing, this laſt Operation will be performed as followeth, being contracted.



Caſe 3.] When Cyphers poſſeſs the firſt, ſecond, third, *&c.* places of the Diviſor, how to abbreviate the Work.

Rule.] As many Cyphers as you have in the Diviſor toward the Right-hand, ſo many Figures ſeparate (toward the Right-hand of the Dividend) from the reſt, by a Point or Daſh with the Pen, and divide the remaining Figures toward the Left-hand in the Dividend, by the ſignificant Figures in the Diviſor, leaving out the Cyphers: See the Operation following.

1562900)

1562900) 137428120 (87

123961

1455820 Remains to be divided into 1562900 parts, which will be less than a Unit.

EXAMPLE 2.

197281000) 5171624|1|0|2|3|5|0 128 (26214506

1226024

423181

286190

889092

999683

132785

1327850

144164128 Remains to be divided into 197281000 Parts.

EXAMPLE 3.

100) 3654 (36

54 Remainer to be divided by 100.

Note, that when the Divisor is a Unit with Cyphers, as this last Example; then if you separate so many Figures from the Right-hand of the Dividend, as there are Cyphers toward the Right-hand in the Divisor (as was taught before) that part of the Dividend toward the Left-hand of the Dash is the Quotient, and that to the Right-hand is the Remainer; As in this Example, you see 36 is the Quotient, and 54 the Remainer; because when the Cyphers are cut off the Divisor, there Remains only 1 to divide by; and it has been taught before, that no Number is made less by dividing by 1.

§. 2. *The*

§. 2. *The Manner of working Division explained, and the Reason of it shewed.*

The two great Difficulties that are in Division, are,

1. That when a Number is to be divided by another, consisting of several Degrees or Places of Figures, it cannot be known without Trial, how often the Divisor can be had in the Dividend.

2. The Substracting the several Products made of the Quotient, and Divisor from the Left-hand of the Dividend, seems incoherent with the Rules of Substraction, of Deducting Unit's place from Units, Ten's place from Tens, *&c.*

To explain and remove both which Difficulties, take the Example and Rules following, where the whole work of Division is made plain, and easie to be understood by a mean Capacity.

The Example I make use of shall be to divide 19467281 by 426?

The Work of Division Explained.

Products of the Divisor.		
by 1 = 426)	19467281	(40000=First Quotient.
	17040000	
by 2 = 852	2427281	5000=Second Quotient.
by 3 = 1278	2130000	
by 4 = 1704	297281	600=Third Quotient.
by 5 = 2130	255600	
by 6 = 2556	41681	90=Fourth Quotient.
by 7 = 2982	38340	
by 8 = 3408	3341	7=Fifth Quotient
by 9 = 3834	2982	
	(Rem. 359)	45697=The Summ of these Quotients, which is the true General Quotient.

In

In this Example,

1. I have made Products of the Diviſor, multiplying it by the ſeveral Digits againſt which the ſaid Products ſtand.

2. As is uſual I prick under the 6 in the Dividend, becauſe I can take the Diviſor from the 4 firſt Figures toward the Left-hand of the Dividend.

3. I conſider what place the firſt Figure in the Quotient toward the Left-hand will poſſeſs, which is always the ſame with the Figure, under which the firſt Point or prick is made, and in this Example is Tens of Thouſand's place; ſo that what Figure ſoever is firſt put in the Quotient, is ſo many Tens of thouſands.

4. I look in my 9 Products, which of them is next to, and leſs than the 4 firſt Figures to the Left-hand of the Dividend, and find the Product 1704 to be next; right againſt which, in the Series of Digits, ſtands 4; wherefore I put 4 in the Quotient, which is 40000, becauſe (as was ſaid in the laſt ſtep) the Quotient will have 5 Places.

5. I multiply the ſaid 1704 by 10000, becauſe the 4 is in that place, or the Diviſor by 40000, and the Product is 17040000, which (according to the true Rules of Subſtraction) is to be taken from the whole Dividend, and the Remainer (as in the Example) is 2427281.

6. I look as before, which of the 9 Products is next to, and leſs than the 4 firſt places toward the Left-hand of my new Dividend 2427281 (becauſe none of the Products can be had in 3 places,) and I find 2130; right againſt which ſtands the Digit 5, which muſt be 5000, becauſe it is to ſtand in the Thouſand's place of the Quotient; where having placed it, multiply (as before) the 2130, by 1000, or the Diviſor by 5000, and deduct the Product from the new Dividend 2427281, proceeding with the reſt of the Figures till nothing, or a Number leſs than my Diviſor remain: which done,

7. I ſum up the 5 Quotients as in the Example, which make the General Quotient 45697; and ſo the Work is ended.

§. 3. *The Demonſtration of Diviſion.*

The deſign of Diviſion is to diſcover how often the Diviſor is contained in the Dividend; whence it neceſſarily follows, That the Quotient contains 1, ſo often as the Dividend contains the Diviſor; And if the Quotient contains Unity as often as the Dividend does the Diviſor,

Divisor, it follows from the 5th Definition to the 5th Book of *Euclid's Elements*, That the Quotient is in proportion to 1, as the Dividend is to the Divisor; and consequently by the 16th of the 6th of *Euclid's Elements*, the Product of a true Quotient, multiplied by the Divisor, is equal to that of Unity by the Dividend; and all Quotients, having these Affections, are therefore true Quotients, and not otherwise.

Example.] If 144 be divided by 6; the Quotient arising (by the foregoing Rules for Division) shall be 24.

For the Quotient 24 contains 1, so often as 144 contains 6; and consequently by the Definition above.

$$24.\ 1 :: 144.\ 6.$$

i. e. As 24 is in proportion to 1; so is 144 to 6.

And by the said 16th of the 6th *Euclid*,

$$24 \times 6 = 144 \times 1.$$

i. e. The Rectangle or Product of the 2 Extreams 24 by 6, is equal to that of the 2 mean or middle Numbers 144 by 1. So that 24 having these Affections, is the true Quotient of 144 by 6.

The Result of this Arithmetical Division is the same with the Geometrical, mentioned by Mr. *Williams*, in the Use of the 44 Prop. of *Euclid's Elements*.

§. 4. *The Proof of Division.*

Divisionmay be proved by dividing the Dividend by the Quotient, and the Quotient will be your former Divisor: Or, you may prove it (as is more usual) by Multiplication; for if you multiply the Quotient and the Divisor together, the Product will be equal to your Dividend.

To instance in the Numbers following: If 1728 be divided by 12, the Quotient will be 144; and if, for proof, you divide 1728 by 144, the Quotient will be your former Divisor (12.) Or, if you multiply 144, the Quotient, by 12, the product will be 1728: See the Work.

```
12) 1728 (144 Quotient }
    ...   12 Divisor   } Multiply
    ----  ---
    52    288
    ---   144
    48    ---
    ---   1728 The Dividend for proof.
    Rem. 0.
```

Or

Or thus by Diviſion:

144) 1728 (12 The former Diviſor.
288

0 Rem.

§. 5. *The Proof of Multiplication.*

The only true way to prove Multiplication is by Diviſion; for if you Divide the Product by either of the Factors, the Quotient will be the other.

Example.] In the Example of the ſecond Caſe of this Chapter, 3484 being multiplied by 9, produceth 31356: And if 31356 be divided by 9 the one Factor, the Quotient is the other Factor; as in the Example.

9) 31356 (3484 Quotient.
43
75
36

0 Remains.

Some Authors have taught to prove Multiplication, by taking the Nines out of the Factors ſingly, and multiplying the Remainers together, and taking the Nines out of the Product, noting that Remainer; then taking the Nines out of the firſt Product, and if the Remainer be equal to the forementioned, they conclude the Work to be right: but that does not at all follow, for by this Rule you may prove a Thouſand falſe Products as true ones.

Example.] Admit 3765 were to be multiplyed by 58, the true Product is 218370; but if you ſuppoſe the Product 398370, (which is 180000 too much,) or 245370, (which is 27000 too much,) they will both prove right according to this Method; nor is there any other Method to prove Multiplication by, ſo true and conciſe as by Diviſion; though 'tis indeed needleſs to prove every Summ you work, by any Method, provided you be carefull in the Operation; or it may not be amiſs if your work is great, to run it over twice very carefully; and if you find both times agree, 'tis to be ſuppoſed your Work is right.

Reduction

Is a Rule Consisting of two Parts viz.t

The Reducing of a Number from a greater to a lesser Denomination, as pounds into Shillings, Hundreds into Pounds, Yards into Feet, &c which is called Reduction Descending and is performed by

Multiplication

The Reducing of a Number from a lesser to a greater Name or Denomination, as Feet into Yards, Gallons into Barrells Farthings into Pounds; &c which is called Reduction Ascending & is performed by

Division

So that all Questions in Reduction are resolved either by Multiplication or Division or both, wch shall be further Explained by the Questions following

Sect. 2.

Caſe 1.] WHen a Number of one Denomination is given to be reduced into a leſſer Denomination.

Rule.] Multiply the given Number by ſuch a Number of Units of the inferior Denomination into which you would have the Number given reduced, as are contained in a Unit of the Denomination which is given, and the Product is the Anſwer.

Example 1.] In 476 Pounds, how many Farthings?

476 Pounds
960 The Farthings in 1 *l.* } Multiply

2856
4284

456960 Farthings for Anſwer.

Example 2.] In 87 Hundred Weight how many Pounds?

87 Hundred
112 Pounds in one Hundred } Multiply

174
87
87

9744 Pounds for Anſwer.

Example 3.] In 527 Ells Flemiſh, how many Quarters of a Yard, each Ell being three Quarters of a Yard?

527 Ells
3 Quarters of a Yard in an Ell } Multiply

1581 Quarters of a Yard for Anſwer.

Example 4.] In 328 Bales of Dowlaſs, how many Pieces?

328 Bales
3 Pieces in a Bale } Multiply

984 Pieces for Anſwer.

Example 5.] In 484 Groſs of Tape, each Groſs 12 Dozen, each Dozen 2 Pieces, and each Piece 36 Yards, how many Yards?

484 Groſs
12 Dozen in a Groſs } Multiply

968
484

5808 Dozen in 484 Groſs
72 Yards in a Dozen } Multiply

11616
40656

418176 Yards for Anſwer.

Caſe 2.] When it is required to reduce Numbers of divers Denominations, into the loweſt Denomination.

Rule.] Work as in the laſt Caſe; but if you have any Number of the next inferior Denomination to that you are reducing, add ſuch Number to the Product.

Example 1.] In 364*l.* 05*s.* 5*d.* how many Pence?

l.	*s.*	*d.*	
364:	05:	5:	
20: The ſhillings in a Pound			Multiply and Add the 5*s.*
	l.	*s.*	
7285 Shillings in 364		05:	Multiply and add the 5*d*:
12 Pence in a ſhilling			

14575
7285

l.	*s.*	*d.*	
87425 Pence in 364:	05:	5:	For Anſwer.

In the laſt Example in reducing the pounds, ſay (0) times 4 (in the pounds) is (0), but 5 (in the ſhillings) is 5 ſhillings; then ſay 2 times 4 is 8, *&c.* And when you come to the ſhillings, ſay, 2 times 5 ſhillings is 10, and 5 in the pence place is 15 pence, put down 5, and

and carry 1, *&c.* Note that if you had any thing in the Ten's place, either in the ſhillings, pence *&c.* you muſt add them when you multiply by the Figure in the Ten's place of the Multiplier.

Example 2.] In 48 *l.* 17 *s.* 11 *d.* 2 *q.* how many Farthings?

l.	*s.*	*d.*	*q.*	
48:	17:	11:	2:	
20: The ſhillings in a pound				} Multiply and Add 17 *s.*
	l.	*s.*		
977 Shillings in	48:	17:		} Multiply, adding the 11 *d.*
12 Pence in a ſhilling				
1955				
978				
	l.	*s.*	*d.*	
11735 Pence in	48:	17:	11:	} Multiply and Add 2 *q.*
4 Farthings in a Penny				
	l.	*s.*	*d.*	
46942 Farthings in	48:	17:	11½	For Anſwer.

Example 3.] In 47 *C.* 2 *Qrs.* 24 ℔. how many Pounds?

C.	*Q.*	℔.	
47:	2:	24:	
4 Quarters in 112 ℔.			} Multiply and add the 2 *Qrs.*
	C.	*Q.*	
190 Quarters in	47:	2:	} Multiply and Add the 24 ℔.
28 Pounds in 1 *Q.* of *C.*			
1524			
382			
	C.	*Q.*	℔.
44 Pounds in	47:	2:	24 For Anſwer.

This Queſtion is more briefly reſolved, as in the Margent, by firſt putting down your 47 *C.* 4 times, and the 2 *Q.* 24 ℔. which is 80 ℔. in Ten's and Unit's place: ſo the Summ is the Anſwer.

C.	*Q.*	℔.
47:	2:	24
47		
470		
478		

5344 ℔ Anſwer.

§. 3. *Re*

§. 3. *Reduction Aſcending.*

To reduce Numbers from a leſſer to a greater Denomination.

Caſe 1.] When the Number given is to be reduced to the next ſuperiour Denomination.

Rule.] Divide the ſaid given Number by ſuch a Number of Units of the Denomination given, as make a Unit of the next ſuperiour Denomination, and the Quotient is the Anſwer.

Example 1.] In 984 Pieces of Dowlaſs, how many Bales, each 3 Pieces? See the Operation.

3) 984 (328 Bales for Anſwer.

8

24

0

Example 2.] In 9744 Pounds, how many Hundreds?

112) 9744 (87 Hundred for Anſwer.

784

0

Caſe 2.] When a Number is to be reduced to a Denomination higher than the next ſuperiour Denomination.

Rule.] Divide the given Number, as before, by ſuch a Number of Units of the Denomination given, as makes a Unit of the next higher Denomination, and note the Remainer. Then divide that Quotient by ſo many Units of that Name or Denomination, which it is of as makes a Unit of the next higher Denomination to the ſaid Quotient, *&c.* noting the Remainers, as in the Examples following.

Exam-

Example 1.] In 87425 Pence, how many Shillings and Pounds?

d.	*s.*	*l.*
12) 87425	(7285	(364
····20)···		
34	12	
102	8	Anſwer 364: :50 05
65	05 *s.* Rem.	

5*d.* Remains.

Example 2.] In 5244 ℔. how many Quarters, and Hundreds?

℔.	*Q.*	*C.*
28) 5344	(190	(47
···4)	··	
254	30	

Rem. (℔ 24) (2) Quarters remains.

C.	*Q.*	℔.
Anſwer 47:	2:	24

Example 3.] In 418176 Yards, how many Groſs of Tape?

Divide the given Number by 72, and that Quotient by 12 for Anſwer; becauſe 72 Yards is 1 Dozen, and 12, Dozen in 1 Groſs.

Yards	Dozen	
72) 418176	(5808	(484 Groſs for Anſwer.
····12)	·	
581	100	
576	48	
0 Rem.	0 Rem.	

Theſe Queſtions are the Converſe of thoſe in Reduction Deſcending, and may ſerve for Proof of them; and likewiſe to ſhew the Learner the Nature and Effects of the Rules.

§. 4. *Re-*

§. 4. *Reduction Aſcending and Deſcending.*

Queſtions performed by Multiplication and Diviſion are theſe that follow; and ſuch like.

Example 1.] In 874 Ells Flemiſh, how many Ells Engliſh?

Multiply the given Number by 3, and divide the Product by 5, and the Quotient is the Anſwer.

874 Ells Flemiſh
3 Quarters of a Yard in 1 Ell } Multiply

5) 2622 (524$\frac{2}{5}$ Ells Engliſh for Anſwer.

12

22

2 Rem. Which, placed over the Diviſor, is $\frac{2}{5}$.

874
6

Anſ. 524$\frac{4}{10}$ or $\frac{2}{5}$.

Or Multiply by 6, and Divide by 10; which is more brief.

Note, that the Remainer is always of the ſame Denomination with the Dividend.

Example 2.] In 46 *C.* of Cotton-Wool, how many Pounds, and what the Price, at 15*d.* a Pound? Anſwer 322 *l.*

46 *C.*
46
46
46

5152 Pound
15 Pence for 1 Pound } Multiply

25760
5152

77280 Pence for Anſwer; which reduce into Pounds as before Taught, and *per* Margent.

	d.	*s.*	*l.*
12)	(77280	(6440	(322
	20)		
	52	4	
	48	4	
	Remains 0	0 Rem.	

Exam-

Example 3.] In 846 Dollars, each 4 *s.* 6 *d.* how many Pounds Sterling?

```
      846 Dollars          } Multiply
       54 Pence per Dollar }
     ----
     3384
    4230
    ----                 s.   l.   s.
12) 45684 d. (3807 (190: 7
    ....  20)..|
    ----     |  ---
     96        18
    ----      ---
     84        0 Remains
    ----
     0 Remains.
```

Example 4.] To Reduce *Flemish* Money into *English*.

In 465 *l.* 13 *s.* 4 *d.* *Flemish*, how many pounds Sterling, at 33 *s.* 4 *d.* *Flemish*, for 1 pound Sterling? Ans. 279 *l.* 8 *s.* Sterling.

Rule.] Divide the pence in 465 *l.* 13 *s.* 4 *d.* by the pence, in 33 *s.* 4 *d.* and the Quotient is the Answer. See the Work.

```
  s.   d.
  33   4        465  13  4
  12             20
  ---           9313 Shill. Flem.
  400             12
                ------
  400          111760 (279 l. Sterl.
  |             ...|
                ----
                 31
                ----
                  37
                ----
                 160 l. Sterl. rem. } Multiply
                  20                 }
                ----
      400)      3200 (8 s. Sterl.
      |         ---|
                  0
```

H Thus

Thus you may Reduce *Flemiſh* Money into *Engliſh*, let the price of a pound Sterling be reckoned any other Number of ſhillings, or ſhillings and pence *Flemiſh*; but when the price is above (which is the true Value) you may perform the ſame by Multiplying the given Number by 3, and Dividing the Product by 5; for 400 *Flemiſh* pence is to 240 Sterling pence, as 5 is to 3.

	l.	*s.*	*d.*	
	465:	13:	4	*Flem.*
			3	
5	1397:	00:	00	
	279:	08:	00	Anſ.

Note, that *French* Lievers, Soulze and Deniers are Reduced into Deniers (or Pence) as the *Engliſh* and *Dutch* Money is, by Multiplying by 20 and 12.

Example 5.] In 364 *French* Crowns, each $54\frac{1}{4}$*d.* Sterling; how many pounds, ſhillings and pence Sterling?

Rule.] Multiply the given Crowns by 54*d.* and the Product is 19656*d.* to which add $\frac{1}{4}$ of 364 for the farthing, and the Summ is 19747*d.* or 82*l.* 5*s.* 7*d.* Sterling for Anſwer. But you will find a briefer way of performing theſe and ſuch-like Queſtions by the Rules of Practice, which will be of great uſe in Caſting up *French* Bills of Exchange.

Example 6.] In 1500 Pieces of Eight *Mexico*, each $52\frac{3}{8}$*d.* Sterling: how many Pounds Sterling?

Rule.] Multiply the 1500 by 52, and the Product is 78000 pence; then for the $\frac{3}{8}$ multiply the 1500 by 3, and divide the Product by 8 and the Quotient is $562\frac{1}{2}$*d.* which add to the 78000*d.* and you have the Anſwer $78562\frac{1}{2}$*d.* Sterling, or 327*l.* 6*s.* $10\frac{1}{2}$*d.* And this Rule is very uſefull in Caſting up Bills of Exchange to *Cadiz*, *Leghorn* and *Genoa*; but may be ſomething more briefly performed, as may all the reſt, by Decimals, or the Rules of Practice.

Example 7.] In 2900 Ducats, each $15\frac{7}{8}$*d.* Sterling; how many pounds, ſhillings, and pence Sterling?

Rule.] Multiply 2900 by 51, and the Product is 147900: Then multiply 2900 by 7, and divide the Product by 8, and the Quotient is $2537\frac{1}{2}$*d.* which added to the 147900, the Summ is $150437\frac{1}{2}$*d.* Sterling, or 626*l.* 16*s.* $5\frac{1}{2}$*d.* This Example you will find uſefull in Caſting up Exchanges to *Venice*.

Exam-

Example 8.] In 2000 Millrees, each 6 *s.* 8½ *d.* how many pounds Sterling?

Rule.] Divide 2000 by 3, (becauſe 3 Six ſhillings and Eight pences make 1 pound Sterling,) and the Quotient is pounds; to which add the pounds in 2000 Half-pence, as 4 *l.* 3 *s.* 4 *d.* to 666 *l.* 13 *s.* 4 *d.* and the Summ is 673 *l.* 16 *s.* 8 *d.* for Anſwer; which Rule is uſefull in Caſting up Bills of Exchange from *Oporto*, or *Lisbon* in *Portugal*. But if the Price of a Millree, in the Courſe of Exchange, be reckoned any other Number of Shillings and Pence, you may Work either by the Rules of Practice following, or Reduce the Value of a Millree into its loweſt Denomination, and Reduce the Product of the Millrees thereby, into Pounds.

The Golden Rule

Is so called from it's extraordinary usefulness, not only
Arithmetical Questions, but in all parts of ye Mathematic

It is also called The Rule of Three, because there is al
wayes Three Numbers given to find out a Fourth, an
it is properly called The Rule of Proportion, because y
first Number beares such Proportion to ye second, as y
third does to the fourth.

The designe of this Rule is to shew how to find a four
Proportional Number by having three given Numbers
which is deducible from ye 16th prop: of ye sixth Book of
Euclids Elements. THE RULE IS

Multiply the 2d & 3d Numbers together, & devide ye
Product by the first Number, and the Quotient thence
ariseing is the 4th Number sought: or

Divide the 2d Number by the 1st, and Multiply the
Quotient by the 3d and the Product is the Number
required. For ye 4th Number containes the 3d so often as
the 2d containes the 1st, and this is called Direct
Proportion.

ALL the Difficulty in this Rule conſiſteth in the right ſtating the three Numbers given; for when you have done that, you have only Multiplication and Diviſion, and the Work is performed: The Rule therefore for ſtating any Queſtion in this kind of Proportion is,

Rule.] Conſider that of the three Numbers given, you have always Two of one Denomination: And,

That Number which is of another Denomination, muſt be always placed in the ſecond Place; and to the Left-hand therefore muſt be placed that Number (of the Two of one Denomination) on which the Second has dependence, and the other Number muſt be placed next the Right-hand: As ſuppoſing it were required to know what the Intereſt of 75 pounds is at the rate of 8 Pound *per Cent. per Annum*, the Numbers will be ſtated thus:

L. prin. *L. int.* : : *L. prin.*

100 : 8 : : 75.

In this Example there are two Numbers that are Principal Mony, and one that is Intereſt; therefore the Intereſt (according to the Rule) muſt ſtand in the Middle, or ſecond Place; the Principal on which the Intereſt dependeth, *Viz.* 100 (8*l.* being the Intereſt thereof) muſt ſtand in the firſt Place toward the Left-hand, and the other Principal on which the fourth Number (which is the Number ſought for) dependeth, muſt poſſeſs the firſt Place toward the Right-hand.

By theſe Rules foregoing, you may with Eaſe and Certainty perform any Operation in Direct Proportion, and for your farther Information take the Examples following.

Example 1.] If the Intereſt of 100*l.* for one Year be 8*l.* what is the Intereſt of 75 Pound for the ſame Time?

L. P. *L. I.* *L. P.*

100 : : 8 : 75

8

600 *l.*

100) 600 (6 For Anſwer.

Exam-

Example 2.] If 32 Rundlets of Brandy cost 96 pounds, what will 4 Rundlets cost at that rate?

Rund. *l.* *Rund.*
32 : 96 :: 4

4

32) 384 (12 *lb* Answer.
64

0 Remains.

Example 3.] If 12 Sacks of Cotton-wool cost 184 *l.* what will 17 Sacks cost?

Sacks. *l.* *Sacks.*
12 : 184 :: 17:

17

1288
184

12) 3128 (260 *l.*
::
72

8 Pound remains
20 Shillings multiply

12) 160 (13 Shill.
:
40

4 Shilling remain
12 Pence multiply

12) 48 (4 Pence

0 Remains.

l. *s.* *d.*
260 : 13 : 4 Answer.

Note,

Note, that (as in the last Example) when any thing remains that is reducible to a lower Denomination; after it is so reduced, it must be divided continually by the first Number.

Case 2.] When any of the 3 Numbers given happen to be of divers Denominations.

Rule.] You may reduce them into the lowest Denomination: And if your first Number require to be reduced, your Third must be reduced likewise into the same Denomination as the first: For the first and third Number before you begin your Operation, must be always of one Name or Denomination.

Example 1.] If 17 Hogs-heads of Sugar cost 320 *l.* 12 *s.* what will 5 of those Hogs-heads be worth?

```
H-ds.   l.   s.   H-ds.
17 : 320 : 12 :: 5
     20
    ----
    6412  Shillings } Multiply
       5  H-heads  }
    ----      s.    l.   s.  d.  q.
17) 32060   (1885  (94:  5: 10  2 6/17:
    ....  20) |
    ----     |  ----
     150      8
    ----     ----
     146      0 Remains.
    ----
     100
    ----
      15  Shillings remains } Multiply
      12  Pence in a shilling }
     ----
      30
      15
    ----
17)  180  (10 Pence
    ----
      10  Pence remains } Multiply
       4  Farthings    }
    ----
17)   40  (2 Farthings
       6  Farthings remains to be divided by 17.
```

Note,

Note, that when you have multiplied the second and third Numbers together, and divided the product by the First, the Quotient is of the same Denomination, as the second Number is; after you have reduced it (as in the last Example) into its lowest Denomination given.

Example. 2.] If 4 *C.* 1 *Q.* 24 lb of Sugar cost 14 *l.* what will 18 *C.* cost?

C. *Q.* lb. *l.* *C.*
4 : 1 : 24 : 14 : 18

4
42
45
500 lb

18
18
18
2016 lb of Sugar } Multiply
14 *l.* Sterling }

8064
2016

28224 (56 : 8 : 11 : 2 $\frac{40}{500}$ Answer
500

l. *s.* *d.* *q.*

32
224 Pound remains } Multiply
20 Shillings in 1 *l.* }

4480 (8 Shillings
500

480 Shillings rem. } Multiply
12 Pence }

96
48

5760 (11 Pence
500

7
260 Pence rem. } Multiply
4 Farthings }

1040 (2 Qrs
500

40 Farthings remains to be divided by 500.

Note,

Note, farther, that what Farthings remains to be divided by the common Diviſor (as in the laſt Example) becauſe you can reduce them into no lower Denomination, you may place them over your Diviſor, as Fractions of a Farthing, which ſhall be explained when we come to Vulgar Fractions, *&c.*

Caſe 3.] When the firſt Number of the 3 given, is but a Unit the Operation is performed by Multiplication only.

Example. 1.] If I give 15 Shillings for a Pound of Thread, what will 250 lb. coſt me at that Rate?

lb.	*s.*	lb.
1 :	15 ::	250
		15
		125
		25

3750 Shillings Anſwer, or *l.* 187 : *s.* 10 :

Example 2.] At 14 *l.* 10 *s.* 6 *d. per* Bagg of Hopps, what coſt 55 Baggs?

Bag.	*l.*	*s.*	*d.*	*Baggs.*
1 :	14	10 ::	6 ::	55.
	20			
	290 Shillings			
	12			
	3486 Pence			
	55 the 3d Numb.			} Multiply
	17430			
	17430			

191730 Pence Anſwer, or *l.* 798 : *s.* 17 : *d.* 6

Caſe 4.] When the third Number of the 3 given (or that toward the Right-hand) is a Unit; ſuch Operation is performed by Diviſion only; if the Number need no reducing.

Example 1.] If 40 Pieces of broad Cloth coſt 590 *l.* what will one Piece coſt?

Pieces. l. Pieces.

40 : 590 :: 1

40) 590 (14¾ *l.* or 14 *l.* 15 *s.* Anſwer.

19

3 Pounds remains.

Example. 2.] If 14 Hogs-heads of Tobacco, poize Nett 9285 lb. coſt 619 *l.* 10 *s.* what will one Pound coſt at that Rate?

lb. *l.* *s.* lb *s.* *d.* *q.*

9285 : 619 : 10 :: 1. Anſwer 1 : 4 : 0 $\frac{480}{9285}$

20

9285) 12390 *s.* (1 Shilling

3105 Shillings rem.

12

9285) 37260 *d.* (4 Pence

120 Pence remains

4

480 Farthings remains to be divided by 9285.

§. 2 *The Single Rule of Indirect Proportion.*

Whereas in the former Section of Direct Proportion, the fourth Number was always proportionably greater than the Third, as the Second was greater than the Firſt: in this kind of Proportion, on the contrary, the greater the third Number is, the leſs is the Fourth; and the leſs the Third is, the greater is the Fourth; and it is therefore called Indirect or Reverſe Proportion.

And whereas in the laſt Section the Product of the Firſt and Fourth is equal to that of the Second and Third; in the Proportion I am now treating of, the Product of the Third and Fourth is equal to that of the firſt and ſecond Numbers; which may ſerve as a Proof for both.

The

The Method of ſtating any Queſtion in this Proportion, is the ſame with Direct: but to find the Number required, this is the *Rule.*] Multiply the firſt and ſecond Numbers toward the Left-hand together, and divide the Product by the Third, and the Quotient ariſing is the Anſwer.

A Rule to know whether a Queſtion propoſed be to be Anſwered by the Rule of Proportion, Direct or Indirect.

Having ſtated the three Numbers given as is formerly directed calling the middle Number the mean, and the two outermoſt Numbers, the extreams: Conſider from the Nature of the Queſtion, whether the third Number requires more or leſs than the ſecond Number; if it requires more, the leſſer Extream is to be your Diviſor; but if the Third require leſs, the greater Extream is your Diviſor: Now ſo often as this leſſer, and the greater Extream happeneth to be the third Number, or that next the Right-hand, ſo often is your Proportion Indirect; but when they are the firſt Number, the Proportion is Direct: an Example or two will make it plain.

Example 1.] If a Board is 9 Inches broad, how much in length will make a ſquare Foot? Say, if 12 Inches broad require 12 in length, to make a ſquare Foot, what length will 9 Inches broad require? It will require more length, becauſe there is leſs breadth. See the Work.

In.br. *long.* *In.br.*
12 : 12 : 9
12

9) 144 (16 Inches in length for Anſ.
9
54
54
0

Example 2.] How many Yards of Silk 3 Quarters broad, will line 9 Yards of broad Cloth, that is 2 Yards broad?

Say, If 6 Quarters wide require 9 Yards in length, what will 3 Quarters wide require in length?

Qrs.br. *Yar.long.* *Qrs.br.*
6 : 9 : 3
6

3) 54 (18 Yards in length for Anſwer.
24
0

Example 2.] If when the Price of a Buſhel of Wheat is 6 *s.* 3 *d.* the Penny-loaf weigheth 9 ℥; what muſt the Penny-loaf weigh, when the price of a Buſhel of the ſame Wheat is 4 *s.* 6 *d.* The Queſtion is thus ſtated.

s.	*d.*	℥.	*s.*	*d.*
6	3	9	4	6
12		12		
75 Pence		54 Pence your Diviſor		

9

54) 675 (12 ℥

135

27 ℥ remains } Multiply
20 Penny-weight }

54) 540 (10 Penny-weight

0 Remains

l. ℥ p. m.
Anſw. 1 : 00 : 10

§. 3. *The Double Rule of Direct Proportion.*

In this kind of Proportion there are 5 Numbers given to find a ſixth, which ſixth will bear ſuch Proportion to the Product made of the fourth and fifth Numbers, as the third Number does to the Product made of the firſt and ſecond Numbers.

The Rule for ſtating the five Numbers given, is:

Make that the third Number from the Left-hand, which is of the ſame Denomination with the Number ſought; then place the two Numbers in the firſt and ſecond Place to the Left-hand, which are conjunctive in the Sence of the Queſtion to the Third, and the other two Numbers in ſuch Order, that the Fourth may be of the ſame Denomination with the Firſt, and the Fifth of the ſame with the Second: which done,

Rule.] Divide the Product of the 3 next the Right-hand, multiplied one in another, by the Product of the two Firſt to the Left-hand, and the Quotient is the ſixth Number ſought for.

Exam-

Example.] If 100 *l.* in Twelve Months gain 6 *l.* what will 500 *l.* gain in Eight Months?

L.prin.	*Month.*	*L.int.*	*L.prin.*	*Month.*
100:	12:	6:	500:	8:
12			6	
Diviſor=1200			3000	
			8	
			24000	

1200) 24000 (20 Pound Anſwer.

00 Remains.

By the Work you may perceive that 500 *l.* will gain 20 *l.* in 8 Months, at the Rate of 100 Principal, gaining 6 *l.* Intereſt in 12 Months.

This Queſtion, or any other of this Nature, may be reſolved at two Single Rules of Proportion, thus: If 100 *l.* require 6 *l.* what will 500 *l.* require? the Anſwer is 30 *l.* Then ſay, If 12 Months require 30 *l.* what will 8 Months require? the Anſwer (as before) is 20 *l.*

The Double Rule of Indirect Proportion.

The Rule for Stating your Queſtion.

Place the three firſt Numbers toward the Left-hand in the ſame Order you did in the laſt Section; and for the other Two, place that the Fourth, which is of the ſame Denomination with your ſecond Number, and conſequently the other next the Right-hand: So will your firſt and laſt, *viz.* that required be of one Denomination, your ſecond and fourth of another, and your third and fifth of another. And,

The Rule for performing the Operation, is:

Divide the Product of the firſt, multiplied in the ſecond; and that Product in the fifth, by the Product made of the third and fourth, and the Quotient is the Anſwer.

Exam-

Example.] What Principal will raise 20 *l.* in Eight Months at 6 *per Cent. per Annum?*

L. prin. *Month.* *L. int.* *Month.* *L. int.*
100 : 12 :: 6 : 8 : 20
12 8

1200 48 = Your Divisor
20
L. in.

48) 24000 (500 Quotient for Answer; which proves the last Operation.

0 Remains.

§. 5. *The Reason and Demonstration of the Single Rule of Direct Proportion.*

If 4 Numbers are Geometrically proportional, the Rectangle or Product made of the Means, is equal to that of the two Extreams from *Euclid. lib. 6. prop.* 16. from which I shall prove the Method for finding the fourth Proportional.

Example.] Admit 4 is in proportion to 12, as 18 is to a fourth Number unknown; for which put (u,) they will stand thus:

4 : 12 :: 18. u

1. *i. e.* As 4 is in proportion to 12, so is 18 to the unknown Num be; then from the fore-mentioned Proposition.

$$4u = 216$$

2. *i. e.* Four times u (which represents the unknown Number) the product of the first and fourth is equal to 12 Times 18, *viz.* 216, the Product of the two Means: then it necessarily follows;

$$u = \frac{216}{4}$$

3. *i. e.* That (u) is equal to 216, divided by 4; for if 4 Times (u) is equal to 216, then one Time (u) must be equal to one fourth part of 216: And,

$$\frac{216}{4} = 54$$

4 Since (u) or the unknown Number, is equal to one fourth part of 216, and that $\frac{1}{4}$ part of 216 is equal to 54; therefore u is equal

equal to 54, which is the fourth Number ſought; and if you compare the ſeveral Steps, you will find the fourth Number to be diſcovered after the ſame Method given for finding it, at the beginning of this Chapter; which is by Multiplying the ſecond and third Numbers together, and dividing the Product by the Firſt.

Or thus, from this *Axiom.*

That the Fourth Number containeth the Third; ſo often as the Second does the Firſt.

Hence $\frac{1}{4}\frac{2}{}=\frac{u}{18}$ that is $\frac{1}{4}$ of 12 is equal to one 18th of *(u)*

Now $\frac{1}{4}\frac{2}{}=3$ therefore $\frac{u}{18}=3$

i. e. Twelve divided by 4, is equal to 3; therefore *u* divided by 18 muſt be equal to 3.

And if $\frac{u}{18}=3$, then $3 \times 18=u$

i. e. If *u* divided by 18 is equal to 3, then 3 Times 18 muſt be equal to *u*, and conſequently *(u)* is equal to 54, for 3 Times 18 is 54, as before.

§. 6. *The Demonſtration of the Single Rule of Indirect Proportion.*

By the Definition of this Rule in Section the ſecond foregoing, the Product of the firſt and ſecond Numbers, is equal to that of the Third and Fourth: from whence this Demonſtration.

6 : 9 :: 3 : *u.*

Therefore by the Definition.

$6 \times 9=3 \times u$, or

$54=3u$.

i. e. The Rectangle of the two firſt Numbers 6 by 9, is equal to that of *u* by 3.

Now if $54=3u$, $u=\frac{54}{3}$.

i. e. If 54 is equal to three Times *(u)* then it follows that one Time *(u)* is equal to one third part of 54:

$\frac{54}{3}=18$ Therefore

$u=18$.

i. e. One third of 54 being 18, therefore *u* is equal to 18, which was required; ſo the Definition is cleared.

By

By the ſame Rules may the Double Rules of Proportion be demonſtrated; but this Book being chiefly deſigned for the Practice of young Merchants; my deſign'd Brevity in things ſpeculative requireth, that I paſs forward to what is more practical.

§. 7. *The Proof of the Rules of Proportion.*

Every kind of proportion I have diſcourſed of, may have the Operations proved two Ways.

Caſe 1.] *Single Direct Proportion.*

When four Numbers are in Direct Proportion, the Product made of the Firſt and Fourth, is equal to that of the Second and Third; otherwiſe the Work is not Rightly performed.

2*dly*, The ſecond Way is thus: As the fourth Number is to the Third, ſo is the Second to the Firſt; otherwiſe the Work is not right.

Caſe 2.] *Single Indirect Proportion.*

When four Numbers are in an Indirect Proportion; the Rectangle of the Firſt and Second, is equal to that of the Third and Fourth; otherwiſe there is an Error in the Work.

2*dly*, Thus: As the Firſt to the Third, ſo is the Fourth Number to the Second in a Direct Proportion; otherwiſe the Operation is not rightly performed.

Caſe 3.] *Double Direct Proportion.*

When a ſixth Number is found in a Direct Proportion; the Rectangle of the Firſt, Second and Sixth, is equal to that of the Third Fourth and Fifth Numbers, if the Work is not Erroneous.

2*dly*, Thus: As the Product of the Fourth and Fifth Numbers is to the Sixth; ſo is the Product of the Firſt and Second to the Third, in a Single Direct Proportion.

Caſe 4.] *Double Indirect Proportion.*

When five Numbers are given, and a Sixth found in an Indirect or Reverſe Proportion, the Rectangle (provided the Work is ſtated by the Rules foregoing in the fourth Section of this Chapter) of the Firſt Second and Fifth, is equal to that of the Third, Fourth and Sixth Numbers, if the Work is rightly performed.

2*dly*, Thus: As the Fifth Number is to the Product of the Third and Fourth, ſo is the Sixth to the Product made of the Firſt and Second, by one Single Direct Proportion.

§. 1. *Nota*

CHAP. VIII.

Of *Fractions*.

§. 1. *Notation and Numeration of Vulgar Fractions.*

1. A Fraction is one or more Parts of a Unit or Integer, according as the ſame is divided.

2. Every Fraction conſiſteth of two Parts, *viz.* a Numerator and a Denominator.

3. The Denominator is placed (in Writing) below the line you write in, and ſheweth how many Parts the Integer, or Unit, is divided into.

4. The Numerator of a Fraction is (in Writing) placed above the line, and ſheweth how many of the ſaid Parts, expreſſed by the Denominator, are contained in the Fraction. For inſtance:

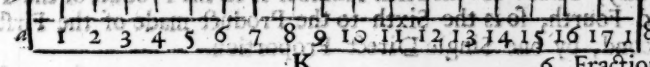
3 Numerator.
4 Denominator.

5. In reading Fractions, the Numerator is firſt mentioned, then the Denominator; as the Fraction above is read, three fourth Parts of any thing: *i. e.* The Denominator ſheweth, that the Integer is divided into four Parts; and the Numerator, that three of thoſe fourth Parts are contained in the Fraction: So by the ſame Reaſon

$\frac{1}{4}$ is one Fourth Part,
$\frac{1}{2}$ is one half, or two fourth Parts.
$\frac{2}{3}$ is two third Parts,
$\frac{5}{6}$ is five ſixth Parts, *&c.* As in the following Table.

One Half, *&c.*	is $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}, \frac{1}{7}, \frac{1}{8}, \frac{1}{9}, \frac{1}{10}$
Two Thirds, *&c.*	is $\frac{2}{3}, \frac{2}{4}, \frac{2}{5}, \frac{2}{6}, \frac{2}{7}, \frac{2}{8}, \frac{2}{9}, \frac{2}{10}$
Three Fourths, *&c.*	is $\frac{3}{4}, \frac{3}{5}, \frac{3}{6}, \frac{3}{7}, \frac{3}{8}, \frac{3}{9}, \frac{3}{10}$
Four Fifths, *&c.*	is $\frac{4}{5}, \frac{4}{6}, \frac{4}{7}, \frac{4}{8}, \frac{4}{9}, \frac{4}{10}$
Five Sixths, *&c.*	is $\frac{5}{6}, \frac{5}{7}, \frac{5}{8}, \frac{5}{9}, \frac{5}{10}$
Six Sevenths, *&c.*	is $\frac{6}{7}, \frac{6}{8}, \frac{6}{9}, \frac{6}{10}$
Seven Eighths, *&c.*	is $\frac{7}{8}, \frac{7}{9}, \frac{7}{10}$
Eight Ninths, *&c.*	is $\frac{8}{9}, \frac{8}{10}$
And Nine Tenths, is	$\frac{9}{10}$

For the whole line *a b*, being a Unit, divided into 8 equal Parts; the line *a d* is $\frac{1}{8}$, the line *a p* is $\frac{2}{8}$, the line *a m* $\frac{7}{8}$ &c.



6. Fractions are either proper or improper.

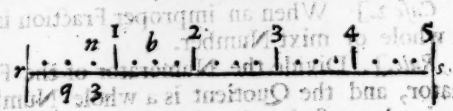
7. A Fraction properly ſo called, or a proper Fraction, is when the Numerator is leſs than the Denominator, as the Fractions foregoing.

8. An improper Fraction is when the Numerator is greater than the Denominator; as $\frac{7}{4}$, $\frac{22}{20}$, *&c.* Agen,

9. Fractions are either Simple or Compound.

10. A Simple Fraction is when the Fraction is immediately the Fraction of a Unit or Integer; as thoſe foregoing in the Table, *&c.*

11. A Compound Fraction is a Fraction of a Fraction, as $\frac{1}{2}$ of $\frac{1}{4}$ of a Pound Sterling, which is equal to 2 *s.* 6 *d.* or it is when a Unit is divided into any Number of Parts, and each of thoſe Parts are again ſubdivided into Parts; theſe laſt Parts are Compound Fractions, being the Fractions of the Fractions of a Unit. So the Whole line (*r s*) being a Unit, the line *r* 1, is $\frac{1}{5}$, *r* 2 is $\frac{2}{5}$, becauſe the Unit is divided into five Parts, which five Parts being ſubdivided into 4 Parts, as under the line: I ſay, each of theſe laſt Parts are Fractions of a fifth Part; ſo the line *r q* is $\frac{1}{2}$ of $\frac{1}{5}$ of the line *r s*; the line *r* 3, is $\frac{3}{4}$ of $\frac{1}{5}$ of it, *&c.*



§. 2. *Reduction of Vulgar Fractions.*

It may ſeem ſtrange to ſome, that Reduction is here taught before Addition, *&c.* but 'tis neceſſary it ſhould be ſo, becauſe Reduction is made uſe of in all the ſubſequent Rules, to fit and prepare Fractions for Addition, Subſtraction. *&c.*

Caſe 1.] When a mixt Number is given to be reduced to an improper Fraction.

Rule.] Multiply the Integers by the Denominator of the Fraction, and to the Product add the Numerator, and place the Summ over the Denominator for a new Fraction.

Example.] Reduce $12\frac{3}{4}$ to an improper Fraction: See the Marginal Operation.

$12\frac{3}{4}$

Anſ. $\frac{51}{4}$

The

The Reaſon of this Rule.

If the Numerator and Denominator of a Fraction be alike, the Value thereof muſt be a Unit; ſo that if you Aſſign a Denominator to any whole Number that ſhall be Reduced to an Improper Fraction, your Numerator muſt be the Product of the whole Number by that Denominator. Thus 1 being Reduced to ſuch Fraction, whoſe Denominator is 2; 2 times 1 is the Numerator, and 2 the Denominator, which is $\frac{2}{2}$ (or 1;) Becauſe, according to the Definition in the 5th Step of the laſt Section, the Unit is divided into two Parts, and there are two of thoſe Parts in the Fraction; and as many Units as there are in the Integral Part, ſo many times the Denominator muſt the Numerator be; becauſe 1 is $\frac{2}{2}$, 2 is $\frac{4}{2}$, *&c.* which Numerator, made of the Integral Part of the mixt Number, muſt be added to the Numerator of the Fractional Part, for the Reaſon mentioned in Addition of Vulgar Fractions.

Caſe 2.] When an improper Fraction is given to be Reduced to a whole or mixt Number.

Rule.] Divide the Numerator of the Fraction by the Denominator, and the Quotient is a whole Number; and if any thing remain, it muſt be placed over the Diviſor.

Example.] Reduce $\frac{51}{4}$ to a whole or mixt Number.

4) 51 (12$\frac{3}{4}$ Anſwer which proves the laſt Caſe.

11

3 Remains.

The Reaſon of this Rule, is:

That ſo often as the Denominator can be had in the Numerator, ſo many Units does the Fractions contain, for $\frac{2}{2}$ is 1, $\frac{4}{2}$ is 2, $\frac{6}{2}$ is 3; ſo that $\frac{7}{2}$ muſt be 3$\frac{1}{2}$, becauſe 2 can be had 3 times in 7, and 1 remains, which muſt be $\frac{1}{2}$, becauſe 1 is half of 2, and $\frac{2}{2}$, as I ſaid before, is a Unit or One.

Caſe 3.] When Fractions have different Denominators, and are to be Reduced to a common Denominator.

Rule.] Multiply the Numerator of each Fraction ſingly, into all the Denominators of the Fractions given, excepting its own, and the Product is a new Numerator; and if you multiply all the Denominators one in another, the Product is a common Denominator.

Example.] Ruduce $\frac{2}{3}$, $\frac{3}{4}$ and $\frac{5}{7}$ to a common Denominator.

3 The Numerat. of the 2d.
3 The Denom. of the 1st.
9 The Product.
7 The Denom. of the 3d.
63 The 2d new Numerator.

Thirdly,
5 The Numerat. of the 3d. } Mult.
4 The Denom of the 2d. }
20 The Product
3 The Denom. of the 1st. } Mult
60 The 3d. new Numerator.

2 The first Numerator.
4 The 2d Denominator.
8 Product. } Mult.
7 The 3d Denom. }
56 The first new Numerator.

Lastly,
3 } Multiply
4 }
12 } Multiply } Denominators.
7 }
84 The common Denominator.

Now if you place each new Numerator over the common Denominator, you will have

$\frac{56}{84}$, $\frac{63}{84}$, $\frac{60}{84}$ } Equivalent to { $\frac{2}{3}$ The first Fraction given. $\frac{3}{4}$ The second Fraction. $\frac{5}{7}$ The third Fraction.

The Reason of this Rule.

Since the end of this Rule is to make the Denominators alike, and the Numerators proportioned thereto, as those given are in proportion. If therefore the Denominators are multiplied by any Numbers that will make the Products alike; and if the Respective Numerator be Multiply'd by the same Number you multiplied its Denominator, it will produce the same thing as this Rule produceth: As if I would Reduce $\frac{2}{3}$ and $\frac{3}{4}$ to a common Denominator; if I multiply the Denominator 3, by 8, and the Denominator 4, by 6, the Products will be each 24 for a common Denominator; and if the Numerator 2, be multiplyed by the said 8, and the 3 by the 6, the Products will be 16 and 18; so the Fractions in a common Denominator are $\frac{16}{24}$ and $\frac{18}{24}$, equal to $1\frac{8}{12}$ and $1\frac{9}{12}$, which would have been produced by the foregoing Rule. But since it would in some Cases be tedious to find out Nnmbers, that multiplying the several Denominators would produce a common Denomi-

Denominator; it is therefore the moſt certain way of performing the ſame, to multiply the Denominators one in another for a common Denominator, as in the Inſtance laſt above, of $\frac{2}{3}$ and $\frac{3}{4}$, the 3 x by the 4, and the 4 by the 3, muſt produce each 12 for a common Denominator; and if you multiply, as before, each Numerator by the Number you multiplied its Denominator, the Products are new Numerators, proportioned to the common Denominator; as the ſeveral Numerators given are proportion'd to their reſpective Denominator.

Caſe 4.] To reduce a Fraction into its loweſt Term.

Rule.] Take $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{1}{4}$, *&c.* of the Numerator and Denominator.

Example.] Reduce $\frac{56}{84}$ to its loweſt Terms:

Say half of 56 is 28, and $\frac{1}{2}$ of 84 is 42, then $\frac{1}{2}$ 28 is 14 and $\frac{1}{2}$ 42 is 21; and becauſe you cannot take half $\frac{1}{21}$, make trial if you can take $\frac{1}{3}$, *&c.* but ſince you can only take $\frac{1}{7}$ of both; ſay the Sevens in 14 is 2, and the 7 in 21 is 3; ſo is the given Fraction equivalent to $\frac{2}{3}$ and proves the firſt Fraction in the laſt Caſe to be right: See the Work.

$\frac{56}{84}$	or	$\frac{28}{42}$	or	$\frac{14}{21}$	or	$\frac{2}{3}$	
Take $\frac{1}{2}$		Take $\frac{1}{2}$		Take $\frac{1}{7}$		Loweſt Term.	

The Reaſon of the laſt Rule.

By the *Lemma* to the 16th Prop. of the 5th Book of *Euclid*'s *Elem.* Two Numbers, howſoever different, if they are divided by one and the ſame Number, the Quotients will have like proportion one to another, as the Numbers given to be divided have to each other: As, $\frac{100}{1000}$ is equal to $\frac{1}{10}$; Becauſe if 100 the Numerator be divided by 100, the Quotient is 1; and 1000 the Denominator, divided by 100, the Quotient 10; which $\frac{1}{10}$, is equal to $\frac{100}{1000}$; becauſe as 100 is to 1000, ſo is 1 to 10; for $100 \times 10 = 1000 \times 1$.

There are other Rules for the Performing the Work of the laſt Caſe, but none ſo proper for the young Merchant's Practice as that foregoing.

Caſe 5.] To reduce a Compound Fraction to a Simple one, equivalent to the Compound.

Rule.]

Rule.] Multiply all the Numerators one in another, for the Numerator of the Anſwer, and the Denominators one in another, for that of the Anſwer.

Example.] Reduce $\frac{1}{4}$ of $\frac{1}{12}$ of $\frac{1}{20}$ into a Simple Fraction.

The Product of the Denominators 4, 12, and 20, is 960, and the Product of 1, 1 and 1 is 1; ſo the Simple Fraction fought for is $\frac{1}{960}$.

The Reaſon of the Laſt Rule.

By the Diſinition of a Compound Fraction in the firſt Section of this Chapter, it is ſhewed, that ſuch a Fraction is nothing but the Subdiviſion of the Parts of a Unit; where, for inſtance, you have a Line ſuppoſed a Unit, divided into 5 parts, which repreſents the Denominator of that part of a Comp. Fraction always next the Right-hand in Reading thereof; each of which 5 parts being again divided into 4 parts, 4 is the Denominator of that part of a Comp. Fraction next the Left-hand; each of which parts being $\frac{1}{4}$ of $\frac{1}{5}$ of the Unit (or whole Line) ſhews that there are 20 ſuch parts as that 4th, in the Line; which is the Reaſon why we always multiply the Denominators together (as 4 and 5) to Reduce the Fraction of a Fraction into the Fraction of a Unit, or a Compound to a Simple, which is all one. And the Reaſon of Multiplying the Numerators together, (as in $\frac{1}{4}$ of $\frac{2}{5}$ of the laſt foregoing Line *r s*) is, becauſe $\frac{2}{4}$ of $\frac{1}{5}$ (as *r n*) is but one half of $\frac{1}{4}$ of $\frac{2}{5}$; therefore $\frac{1}{4}$ of $\frac{2}{5}$ muſt be 2 times (*r n*) equal to (*r b*) or $\frac{6}{20}$ of the Line (*r s*;) for that which before the Subdiviſion of the Line, was $\frac{1}{5}$, is (now the whole Line is divided into 20) $\frac{4}{20}$; ſo that $\frac{1}{4}$ of $\frac{4}{20}$ is equal to $\frac{1}{20}$, and conſequently 4 times $\frac{1}{20}$ is $\frac{6}{20}$; which plainly ſhews why, if the Denominators are multiplied together for that of a Simple Fraction, the Numerators muſt likewiſe be multiplyed together for the Numerator of the ſame Fraction.

Caſe 6.] To find the Value of any Fraction, whether the ſame be of Coin, Meaſure, Weight, *&c.*

Rule.] Multiply the Numerator of the Fraction by ſuch a Number of Units of the Next inferior Denomination, as is equal to a Unit of the Denomination the Fraction is part of, and divide the Product by the Denominator, ſo the Quotient will Anſwer your Queſtion; but if any thing remain, reduce that to the next lower Denomination, and divide as before.

Exam-

Example.] What is the Value of $\frac{58}{146}$ of a Hundred Weight? See the Operation.

134 Hundred
4 Quarters of Hundred } Multiply

146) 536 (3 Quarters of Hundred
98 Quarters remains
28 Pound in a Quarter } Multiply

784
196

146) 2744 (18 Pound
1284

116 Pounds remain
16 Ounces in a Pound } Multiply

696
116

146) 1856 (12 Ounces.
396

104 Ounces remains
16 Drams in 1 Ounce } Multiply

624
104.

146) 1664 (11 Drams, $\frac{58}{146}$
204
58

Q. lb. ʒ. dr.
Answer 03 : 18 : 12 : 11 $\frac{58}{146}$

The

The Reason of the last Rule.

The Reason of this Rule is Plain; for suppose a Line, divided into 20 parts, the whole Line, as (*a b*) will represent 1 pound, and the 20 parts 20 shillings. Now suppose there is a Fraction given, of which you would find the Value as $\frac{3}{4}$ of a pound Sterling. Draw another Right Line of the same length with the former, and parallel thereto, as (*c d*) which divide (according to the Definition of a Fraction) into 4 parts, to represent your Denominator; and right against 3 of those parts, in this Line shall stand 15 in the Line of shillings; which shews, that $\frac{3}{4}$ of a pound Sterling is 15 s. and the same may be said of any other Fraction; for as 4 (the whole Line *c d*, or Denominator of the Fraction given) is in proportion to 20 s. (the whole Line (*a b*): So is 3 the Numerator or Number of parts in the Fraction given (as in the lower Line (*c r*) to 15 s. the Value of the said Fraction given; And therefore do you multiply and divide as in the last Rule directed for.

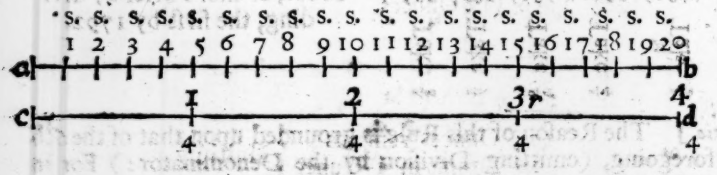
Denom. s. Numer. s.

4 20 3 15

3

s.

4) 60 (15 Answer.



Case 7.] To Reduce Fractions of a lower Denomination to a higher.

Rule.] Consider what Denomination your Fraction is of, and how many of that make a Unit of the next, *&c.* to the Denomination you would have your Fraction reduced to; then work as in the fifth Case of this Chapter.

Example.] Reduce $\frac{1}{2}$ of an Ounce Averdupoize into the Fraction of a Hundred Weight.

Ratio.]

Ratio.] 16 Ounces being 1 Pound, $\frac{1}{3}$ of an Ounce is $\frac{1}{3}$ of $\frac{1}{16}$ of a Pound, then I conſider that 28 Pound is a Quarter of an Hundred, and that 4 Quarters is 1 Hundred; therefore $\frac{1}{3}$ of an Ounce is,

$\frac{1}{3}$ of $\frac{1}{16}$ of $\frac{1}{28}$ of $\frac{1}{4}$ of a Hundred; which by the fifth Caſe foregoing is $\frac{1}{8960}$ of a Hundred.

Caſe 8.] When you would reduce a Fraction of a higher to a Fraction of a lower Denomination.

Rule.] Reduce the Numerator of the Fraction into that Denomination you would have your Fraction of, and place it over the Denominator given for a new Fraction.

Example.] Reduce $\frac{1}{8960}$ of the Hundred into a Fraction of an Ounce.

112 Pound
16 Ounces } Multiply

672
112

Product 1792 Ounces in the Numerator; ſo the Anſwer is $\frac{1792}{8960}$; which Fraction, in its loweſt Term, is $\frac{1}{5}$, and proves the laſt Caſe. See the Work.

$\frac{1792}{8960}$, $\frac{896}{4480}$, $\frac{448}{2240}$, $\frac{112}{560}$, $\frac{56}{280}$, $\frac{8}{40}$, $\frac{1}{5}$. Proof, or more brief by dividing, the firſt by 1792.

Take ½ Take ½ Take ¼ Take ½ Take ½ Take ⅛

Ratio.] The Reaſon of this Rule is grounded upon that of the 6th Caſe foregoing, (omitting Diviſion by the Denominator:) For in 1 *C.* or (112 *l.*) are 1792 Ounces, now ſuppoſing the Denominator 1792; $\frac{1}{1792}$ of a *C.* is juſt $\frac{1792}{1792}$ of an ℥, or 1 Ounce: So by the ſame reaſon, the Hundred being, as in the *Example*, divided into 8960 parts, each part muſt be leſs than an Ounce; and to know therefore how much leſs, or what part of an Ounce the ſaid $\frac{1792}{8960}$ is, is no more than to ſee how many times 1792 is contained in 8960; for how much ſoever 1792 is leſs than 8960, ſo much muſt the Fraction want of being a Unit (as here of 1 ℥) by the Reaſon of the Rules to Caſes 1 and 2. So that 1792 being but $\frac{1}{5}$ of 8960, it follows, that $\frac{1792}{8960}$ is but $\frac{1}{5}$ of an Ounce.

§. 3. *Addition.*

Case 1.] When a Simple Fraction is to be added to a Simple.

Rule.] If the Fractions are not in a common Denominator, reduce them to one by the third Case of the Last Section; then add the Numerators together, and divide the Summ by one Denominator, and the Quotient is the Summ required; and if any thing remain, place it over the Divisor.

Example.] To $\frac{2}{3}$ add $\frac{1}{6}$.

The Fractions in a common Denominator are, $\frac{12}{18}$ $\frac{3}{18}$.

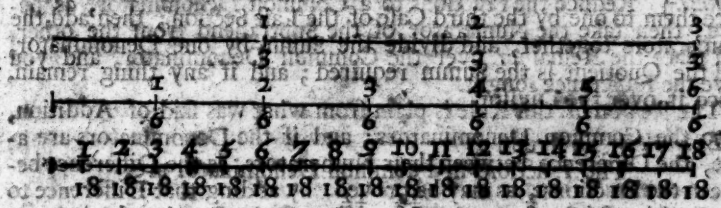
12 The First Numerator.
15 The Second.

27 The Summ, which divided by 18, is $1\frac{9}{18}$, or $1\frac{1}{2}$ for Answer.

The Reason of the Rule foregoing.

The Reason why you are first to reduce your Fractions to a common Denominator, before you can know their Summ Total, is, Because the Aggregate of most Fractions could otherwise never be discovered; for a Fraction is more or less, according as the Numerator is more or less than its Denominator; so the Numerators are only to be added. Now suppose (as in the foregoing Example) that $\frac{2}{3}$ is to be added to $\frac{1}{6}$, in one of these Fractions the Unit is divided into 6 parts, and in the other, into 3 parts; now if I should add the Numerators together, they make 7; but of which of these parts, it is not known: But if the Fractions are reduced to a common Denominator, their Numerators will still retain the same Proportion to their Denominators, and when the Unit is divided in both Fractions into a like Number of parts, the Summ of those parts contained in each Fraction, is the true Aggregate of both Fractions; so $\frac{1}{4}$ and $\frac{1}{4}$ is $\frac{2}{4}$, $\frac{1}{2}$ and $\frac{1}{2}$ is $\frac{10}{12}$: Or as in the 3 Lines following, which are of equal Length, and supposed each a Unit; the 1st divided into 3, the 2d into 6 parts, are the Denominators given, and the 3d Line is divided into 18 parts, (the Product of 3 and 6,) which is the common Denominator; where right-against $\frac{2}{3}$ (in the uppermost Line)

Line) you have $\frac{1}{18}$ in the loweſt Line; and againſt $\frac{1}{6}$ in the 2d Line you have $\frac{1}{18}$ in the loweſt; which ſhews plainly, that $\frac{1}{3}$ is $\frac{1}{18}$, and $\frac{1}{6}$ is $\frac{1}{18}$: Now the Summ of 12 and 15 parts of the loweſt Line is $\frac{27}{18}$, or one whole Line and a half; As in the Example.



Caſe 2.] When a mixt Number is to be added to a Mixt.

Rule.] Work with the Fractional parts as before, and afterward add the Summ of the Fractions to the Summ of the Integers, and you have your Deſire.

Example.] To $1\frac{1}{2}$ add $74\frac{1}{3}$.

The Summ of the Fractions by the laſt Caſe is $1\frac{1}{06}$, which, added to 1 and 74, makes $79\frac{1}{06}$.

$$\left.\begin{matrix} 1\ \frac{1}{2} \\ 1 \\ 74 \end{matrix}\right\} \text{Add}$$

$76\frac{1}{06}$ the Summ required.

Or you may perform the Work, by reducing the given Numbers to improper Fractions, as in *Caſe* 1. of the laſt Section; and ſo proceeding, as in the firſt Caſe of this Section.

Caſe 3.] When a Compound Fraction is to be added to a Simple,

Rule.] Reduce the Compound Fraction to a Simple, by the fifth Caſe of the laſt Section; then find the Summ by the firſt Caſe of this Section.

Example.] To $\frac{15}{42}$ add $\frac{1}{8}$ of $\frac{2}{3}$.

The Compound Fractions in a Simple are, $\frac{2}{24}$, or $\frac{1}{12}$.

The Common Denominator of $\frac{1}{8}$ and $\frac{1}{12}$, is as followeth.

$\frac{12}{168}$ and $\frac{14}{168}$.

The Summ of the Numerators is 102, and of the Fractions $\frac{12}{168}$ for Anſwer.

§. 4. *Subtraction.*

Case 1.] When a Simple Fraction is to be deducted from a Simple.

Rule.] Reduce the Fractions to a Common Denominator, as before; then take the Numerator of the Subtrahend from the other, and place the Remainer over the Common Denominator, and you have the Difference sought.

The Reason of this Rule is plain from what was said of Addition, as to the Common Denominators; and if the Denominators are alike, the Difference between their Numerators, is the Difference between the Fractions: as may be proved, by adding that Difference to the Fraction subtracted: As, $\frac{2}{7}$ from $\frac{5}{7}$, rests $\frac{3}{7}$: For $\frac{3}{7}$ and $\frac{2}{7}$ is $\frac{5}{7}$.

Example.] From $\frac{36}{48}$, take $\frac{20}{48}$. See the Work.

36 The first Numerator. 48 The Common Denominator.
20 The 2d Numerator.

16 Difference. Answer $\frac{16}{48}$ or $\frac{1}{3}$.

Case 2.] When a Compound Fraction is to be deducted from a Simple.

Rule.] Reduce the Compound Fraction to a Simple, by the fifth Case of Section 2. then work as in the last Case.

Example.] From $\frac{91}{351}$, take $\frac{2}{3}$ of $\frac{13}{27}$.

The Compound Fraction in a Simple is $\frac{26}{81}$.

$$\frac{13}{27} \quad \frac{16}{14} \quad \frac{27}{14}$$

$$\frac{91}{26} \quad \frac{64}{16} \quad \frac{108}{27}$$

351 = The first Numer. 224 = The 2d Numer. 378 = The Com. D.
224 Deduct.

127 Remains. So the Answer is $\frac{127}{378}$.

Case 3.]

Case 3.] When a Simple Fraction is to be deducted from a whole Number.

Rule.] Deduct the Numerator from the Denominator, and place the Remainer over the Denominator; then deduct 1 from the Integer, and place the Remainer before the remaining Fraction, and you have the Answer.

Example. From 12 take $\frac{3}{4}$. The Answer is $11\frac{1}{4}$.

Or thus:

According to the Rules foregoing, place 1 under the 12, and so proceed, as in the first Case of this Section; but the first way is the briefer.

Note, that the 1 borrowed from the 12 (in the first method) is $\frac{4}{4}$; so that if from $\frac{4}{4}$ you take $\frac{3}{4}$, there rests $\frac{1}{4}$.

Sect. 5. *Multiplication.*

Case 1.] When you are to multiply a Simple Fraction by a Simple.

Rule.] Multiply all the Numerators one in another, for the Numerator of the Product, and likewise the Denominators for the Denominator of the Product.

Example.] Multiply $\frac{1}{2}$ by $\frac{2}{3}$. Answer $\frac{2}{6}$ or $\frac{1}{3}$.

The Reason of Multiplication of Fractions.

The Work of Multiplication of Fractions is different from that of whole Numbers, for the Product is always less than the Multiplicand, tho 'tis always greater in whole Numbers; the former being the Multiplying of the parts into which a Unit is divided, which must needs make the parts produced less than those given; the latter multiplying Units, must needs augment the Number; the former decreasing the parts of a Unit to Infinite littleness; the latter augmenting the Number of Units *ad Infinitum*. Now the Reason of the Rule, is, That if any Fraction be multiplied by 1, it produceth the Fraction given; if by $\frac{1}{2}$, it produceth $\frac{1}{2}$ the Fraction given, *&c.* So that to multiply $\frac{1}{4}$ by $\frac{1}{3}$, produceth $\frac{1}{3}$ of $\frac{1}{4}$, or $\frac{1}{12}=\frac{1}{12}$, which is fully explained in the Reason of the Rule to *Case* 5. *Sect.* 2.

Case 2.] When you multiply a whole Number by a Fraction.

Rule.] Multiply the Integer by the Numerator of the Fraction, and the Product placed over the Denominator, is the Answer; which differeth

differeth nothing from the laſt Caſe, if you put a Unity under the Integral part, making it like a Fraction.

Example.] Multiply 126 by $\frac{1}{7}$.

Anſwer $\frac{126}{7}$ or 54, by Caſe 2. of §. 2.

Caſe 3.] When you multiply a Simple by a Compound Fraction,

Rule.] Reduce the Compound Fraction into a Simple, and work as in Caſe 1. of this Section.

Example.] Multiply $\frac{1}{12}$ by $\frac{1}{2}$ of $\frac{1}{3}$.

Anſwer $\frac{1}{72}$ or $\frac{1}{72}$.

§. 6. *Diviſion.*

Caſe 1.] When you would divide a Simple Fraction by a Simple,

Rule.] Having placed the Dividend and Diviſor, as in whole Numbers, multiply the Numerator of the Diviſor, in the Denominator of the Dividend, for the Denominator of the Quotient: And the Denominator of the Diviſor, in the Numerator of the Dividend, for the Numerator of the Quotient.

Example.] Divide $\frac{1}{12}$ by $\frac{1}{2}$.

$\frac{1}{2}) \frac{12}{12} (\frac{12}{12}$ or $1\frac{0}{12}$.

The Reaſon of the Rule.

1. To make a Fraction greater in Value, is nothing but to multiply (or add to) its Numerator, or to divide or take from its Denominator.

2. To make a Fraction leſs, is to multiply (or add to) its Denominator, or to divide or take from its Numerator.

3. Upon theſe two Axioms the Reaſon of the Rule given for Diviſion of Vulgar Fractions will appear. Suppoſe, for Inſtance, $\frac{1}{12}$ is to be divided by $\frac{1}{4}$; if it were divided by 1, the Quotient would be $\frac{1}{12}$; and therefore, ſince it is to be divided by a quarter of 1, the Quotient muſt be 4 times $\frac{1}{12}$.

4. For both in Fractions and whole Numbers, by how much leſs the Value of the Diviſor is, by ſo much more will that of the Quotient be; which is therefore in this Example, according to the firſt Axiom $\frac{12}{12}$; and ſhews plainly, why the Numerator of the Dividend

is

is multiplied by the Denominator of the Diviſor to produce the Numerator of the Quotient, whoſe Denominator is always the ſame with the Dividend, ſo often as 1 is the Numerator of the Diviſor.

5. But if the $\frac{1}{5}$ be divided by $\frac{2}{3}$ then the Quotient will (by the 4th Step) be but a 3d of the laſt Quote, *viz.* of $\frac{1}{4}$, becauſe $\frac{2}{3}$ (this Diviſor) is 3 times as much as the Diviſor $\frac{1}{3}$.

6. The moſt Natural way therefore to divide by $\frac{2}{3}$, is to take $\frac{2}{3}$d of the Numerator of the Quotient ariſing from dividing the ſame Fraction by $\frac{1}{3}$, which is $1\frac{1}{2}$, according to the ſecond Axiom.

7. But becauſe it would often happen, that the Numerator of the Quotient cannot be divided by the Numerator of the Diviſor without a Remainer, which would be more troubleſome and leſs exact; it is therefore more Practicable (ſince it produceth the ſame thing by the 2d Axiom) to multiply the Denominator of the Dividend by the Number you ſhould have divided the Numerator of the Quotient, which in this inſtance of $1\frac{1}{2}$ by $\frac{1}{4}$ is 14 by 3, which produceth 42; ſo the Anſwer is $\frac{1}{42}$ or $1\frac{1}{2}$, the ſame as by the 6th Step; and plainly ſhews the Reaſon, why the Denominator of the Dividend is multiplied by the Numerator of the Diviſor, to produce the Denominator of the Quotient.

Caſe 2.] When you divide a whole Number by a Fraction.

Rule.] Place a Unit under the whole Number, and work as in the laſt.

Example.] Divide 54 by $\frac{3}{7}$. See the Operation.

$\frac{3}{7})\frac{54}{1}(\frac{126}{1}$ Anſwer or 126; which proves the ſecond Caſe of the laſt Section.

Caſe 3.] When you divide a Simple Fraction by a Compound.

Rule.] Reduce the compound to a Simple Fraction, and work as in Caſe the firſt.

Example.] Divide $\frac{1}{133}$ by $\frac{1}{9}$ of $\frac{1}{7}$. The Compound Fraction is $\frac{1}{63}$.

$\frac{1}{63})\frac{1}{133}(\frac{1}{1995}$ or $\frac{1}{19}$, which proves *Caſe* 3. of *Sect.* 5.

Having in the two laſt Sections ſhewed the way of multiplying and dividing Fractions, it would be needleſs to ſay any thing of the Golden Rule, ſince there is nothing in it but what has been already done; obſerving only to multiply and divide by the fractional way, inſtead of whole Numbers.

§. 7. *Re-*

§. 7. *Reduction of Decimal Fractions.*

A Decimal Fraction is only different from a Vulgar in this: That the Denominator of a Decimal Fraction is either 10, or some power of 10, *viz.* 100, 1000, 10000, *&c.* so that the Denominator is easily known without expressing it; for in a Decimal Fraction there is a Point or Prick toward the Left-hand of the Numerator, which Point always possesses the like place, as the first Figure toward the Left-hand would, if it were to be wrote down: Thus $\frac{1}{10}$ is .1, the Prick being in the Ten's place, and therefore denotes the Denominator to be 10; $\frac{12}{100}$ is .12, $\frac{125}{1000}$ is .125; $\frac{1964}{10000}$ is .1964; $\frac{17}{1000}$ is .017; $\frac{24}{10000}$ is .0024, *&c.*

The manner to reduce a Vulgar Fraction to a Decimal, is by this Proportion.

Rule.] As the Denominator of the Vulgar Fraction given,
Is in proportion to its Numerator:
So is 1000,
To the Numerator of the Decimal, whose Denominator is 1000.
Or so is 10000 to the Decimal, whose Denominator is 10000, *&c.*

Example.] What is $\frac{1}{8}$ in a Decimal Fraction? See the Operation.

8 : 1 : : 1000

8) 1000 (.125 Answer.

40

40

0

But because it sometimes happens that a Cypher or more is to possess the 1, 2, *&c.* Places of the Decimal toward the Left-hand; therefore take this

Rule.] As many Cyphers as you have in the third Number of the 3 in proportion, as above, so many places must you prick off in the Quotient toward the Right-hand.

Example.]

Example 2.] How is 9 *d.* expreſſed in the Decimal of a Pound Sterling?

Rule.] Conſider that in a Pound are 240 Pence; therefore 9 *d.* is $\frac{9}{240}$ *l.* in a Vulgar Fraction by the ſeventh Caſe of Section the Second foregoing, for 9 *d.* is $\frac{3}{80}$ of $\frac{3}{80}$ of a Pound.

Then ſay as in the laſt Example.

240: 9:: 10000

9

l.

240) 90000 (.0375 Anſw.

.1800

1200

0 Remains.

In this Example, becauſe I had 4 Cyphers in the third Number, therefore I muſt prick 4 places off toward the Right-hand the Quotient for Decimals; but becauſe the ſaid Quotient did but conſiſt of 3 places therefore I ſupply the fourth to the Left-hand with a Cypher.

Note, that the greater your third Number is, the nearer do you bring your Decimal to Truth, when any thing happens to remain, as in the Examples following; but in moſt Caſes where the Decimal is not to be multiplied by a great number, it is ſufficient that the fourth Number be 1000.

But when you reduce $\frac{1}{4}$, or $\frac{1}{2}$, or $\frac{3}{4}$ to Decimals, or any Number of Shillings to the Decimal of a Pound, it is ſufficient in theſe Caſes if your third Number be 100.

Example 3.] How is 3 Farthings wrote in the Decimal Fraction of a Pound Sterling?

Work, as you ſee in the Margent, by the Rules given in the laſt Example, and you will find the Anſwer to be .00302, or 302 Hundred Thouſand Parts of a Pound.

Qrs in a ℔ *Qrs*

960: 3:: 100000

3

l.

960) 300000 (.00302

2000

80 Remains.

Example 4.] How is 12 Pounds expreſſed in the Decimal of 112, or One Hundred?

The Vulgar Fraction by the laſt Examples is $\frac{12}{112}$ Hundred; therefore the Decimal is .1071, as followeth.

112 : 12 :: 10000

12

112) 120000 (.1071

800

160

48 Remains, which is inconſiderable, being leſs than $\frac{1}{10000}$ of a Unit.

Example 5.] How is 13 Shillings in the Decimal of a Pound?

In a Vulgar Fraction 13 Shillings is $\frac{13}{20}$ *l.* and in a Decimal .65 *l.*

20 : 13 :: 100

13

20) 1300 (.65 Anſwer.

100

0 Rem

Exam-

Example 6.] How is 14 *s.* 6 *d.* in the Decimal of a Pound?

In 14 *s.* 6 *d.* are 174 *d.* and the Decimal (by the ſecond Example) is .725 *l.*

240 : 174 :: 1000

174

240) 174000 (.725 *l.* Anſwer.

600

1200

0 Remains.

Note, that you may by the Rule following, write down any Number of Shillings in the Decimal of a Pound, without any Proportion.

Rule.] If your Shillings are an even Number, half of them is the Decimal of a Pound; but if they are odd, put a Cypher to the Right hand, and then the half is the Decimal of a Pound.

Thus 14 *s.* is .7 *l.* 16 *s.* is .8 *l.* *&c.* Likewiſe 13 *s.* or 130 is .65 *l.* 15 *s.* or 150 is .75 *l.* *&c.*

You may likewiſe write down any number of Pence or Farthings in the Decimal of a Pound, without working by the foregoing Rules:

For if you reduce the given Pence into Farthings, and place a Cypher to the left-hand, you have the Decimal of a Pound required: but if the ſaid Farthings exceed 14, you may add one (for reaſon given in the next Caſe) and another for each 39 Farthings.

Thus 3 *d.* is .012 *l.* 9 *d.* is .037 *l.* 11 *d.* is .046 *l.*

Caſe 2.] When it is required to find the Value of any Decimal.

Rule.] Multiply the Decimal given, by ſuch a Number of Units of the next inferiour Denomination, as make a Unit of that your Decimal is of, and prick from the Right-hand of the Product ſo many places as your Decimal conſiſteth of: So thoſe towards the Left-hand the ſaid Point or Prick are Integers; and thoſe to the Right-hand it, are parts of a Unit of thoſe Integers.

Example 1.] What is the value of .1071 of a Hundred? See the Operation.

.1071 Hundred
4 Quarters in a Hundred } Multiply

.4284 Quarters of a Hundred
28 Pound } Multiply

34272
8568

l. 11 .9952 Parts of a Pound.

Note, that if you suppose the Denominator of your Decimal to be 10000, you will find this way of finding the Value of a Decimal Fraction to differ nothing from that of Vulgar: *Case* 6. *Sect.* 2. of this Chapter.

In the last Example you see that the Value of .1071 Hundred is 11 Pound; and the Parts being another Pound, wanting less than a Hundred part of a Unit, you may call the value 12 Pound: which proves the Work in the fourth Case of the last Section. And,

Note, that as often as the Decimal (as in the Example last preceding) is above .75, in the lowest Denomination, you may call it a Unit.

Example 2.] What is the Value of .747 of a Pound *Troy*? See the Work.

.747 Parts of a Pound
12 Ounces in a Pound } Multiply

1494
747

Ounces 8.964 Parts of an Ounce
20 Penny-weight } Multiply.

Penny-weight 19.280 Parts of a Penny-weight
24 Grains——————— } Multiply

112
56
Grains 6.720 Parts of a Grain.

So

So that by the Operation you may perceive that the Value of .747 *l.* is 8 $\frac{3}{4}$. 19 *d-w.* 6 Grains, and about $\frac{1}{4}$ of a Grain.

Example 3.] What is the Value of .9184 of a Pound Sterling?

Answ. 18 *s.* 4 *d.* 1 *q.*

.9184 Parts of a Pound
20 Shillings in a Pound } Multiply

Shillings 18 3680 Parts of a Shilling
12 Pence in a Shilling } Multiply

736
368

Pence 4.4160 Parts of a Penny
4 Farthings } Multiply

Farthings 1.6640 Parts of a Farthing.

Note, that the Value of a Decimal of a Pound, as in the laſt Example, may be found by inſpection, by this

Rule.] Double the Figure ſtanding next the Point in the Decimal given; and if the next Figure toward the Right-hand the aforeſaid Figure is 5 or more, add 1 to the Product: Then what Figure ſtands in the ſecond place, above or under 5, reckon ſo many Tens of Farthings; and what ſtands in the third place from the Prick is ſo many Farthings; which as often as they are above 13, make leſs by 1, or above 39 leſs by 2. So .347 *l.* is 6 *s.* 11 $\frac{1}{4}$, *&c.*

The Reaſon of this Rule.

That place in a Decimal Fraction next the Prick, is call'd *Primes*, being ſo many Tenth parts of a Pound: Now $\frac{1}{10}$ of a Pound being 2 Shillings: therefore whatever Figure poſſeſſeth that place, muſt be multiplied by 2.

The reaſon why you add 1 to the Product, as often as the ſecond Figure from the Prick is 5, or more, is becauſe .05 of a Pound is 1 Shilling; for if .1 *l.* be 2 Shillings, then half .1, which is .05, muſt be 1 Shilling.

Laſtly, Your reckoning the ſecond and third Places from the Prick ſo many Farthings, ſuppoſes 1000 Farthings in a Pound; and there being

being but 960, that Rule must be something erroneous, but 'tis near enough the Truth for ordinary practice; especially if for the 40 Farthings which the 1000 exceeds the 960, you make this allowance of deducting 1 at every 25; for if 1000 is 40 too much, 500 is 20 too much, 250 is 10 too much, 50 Farthings is 2 Farthings too much, and 25 is 1 Farthing too much; so that your Computation for 13 Farthings is $\frac{1}{2}$ a Farthing too much; and if you deduct a Farthing at all Decimals between 13, and 38 or 39, it may be near enough; for less than a Farthing is never received or paid in English Coin. Thus I hope the Rule is made plain, and by it you will find .750 is 7 Tenths of a Pound, or 14 *s.* and .050 *l.* or 50 Farthings made less by 2 for the Reason aforesaid, is 48 Farthings, or 1 Shilling more, which makes 15 *s.* also .194 *l.* is 1 Tenth of a Pound or 2 Shillings, .050 *l.* or 1 *s.* more, which makes 3 *s.* and 44 Farthings, (the 9 being 4 above 5) made less by 2, for the Reason aforesaid, is 10$\frac{1}{2}$ *d.* So the value is 3 *s.* 10$\frac{1}{2}$ *d.*

§. 8. *Addition.*

There is no difference between Addition of Decimals, and whole Numbers of one Denomination; observing only to place the Decimals Point under Point, as in the Examples, and prick so many off the Summ as are in the greatest Number of places in the Decimal given.

Example 1.	*Example* 2.	*Example* 3.
46 .9765 *l.*	.39462	.987
360 .146	.0013	.3642
41 .007	.99	.853
72 .9	.176	.9761
521 .0295 Total.	1 .56192 Total.	3 .1803 Total.

The Reason of this Rule.

The Reason of adding Decimals thus, will appear from that of Vulgar Fractions, after reduced to a common Denominator, in which Decimals always are, that to the Decimal of the most places, being the Common Denominator, which is the Divisor for the Sum of the Numerators, as in the Rule to Case the 1st. of Sect. the third of this Chapter.

§. 9. *Sub-*

§. 9. *Subſtraction of Decimals.*

Place the Numbers as in the laſt, and proceed as in Subſtraction of one Denomination.

Example 1.	*Example* 2.	*Example* 3.
From 39 .0042	From 160 .99	From 389 .0
Take 7 947	Take 94 .8462	Take 0 .346
Rem. 31 .0579	Rem. 66 .1438	Rem. 388 .654

This Rule is the very ſame with that in Vulgar Fractions, §. 4. of this Chapter; Decimals always having a Common Denominator, as is ſaid before; ſo that the difference between the Numerators or Numbers given, is the Numerator of the Anſwer, as in Vulgar Fractions.

§. 10. *Multiplication of Decimals.*

In this Rule you are to place the Factors, and work as in whole Numbers: But after you have found the Product, obſerve this General

Rule.] As many Decimal places as you have in both the Factors, ſo many places muſt you prick off toward the Right-hand of the Product. And if ſo many places happen not to be contain'd in the ſaid Product, (as it will happen when you multiply two Fractions together that are of little value) you are to make up the Number by Cyphers toward the Left-hand the ſaid Product.

The Reaſon of this Rule is plain, it differing nothing from that given for multiplying Vulgar Fractions, *Sect.* 5. of this Chapter; for by multiplying the Sums given together, you multiply the Numerators; and by cutting off as many as are in both Decimals given, you multiply the Denominators, and divide that of the Numerators by the Product of the Denominators. Thus to multiply $\frac{1}{2}$ by $\frac{3}{4}$, is the ſame as .75 by .5, and 100 by 10; *viz.* $\frac{75}{100}$ by $\frac{5}{10}$, for 5 times 75 is 375; and 10 times 100, is 1000: ſo the Product by the $\frac{375}{1000}$, or .375.

Exam-

Example 1
Multiply 3 .467
By 19. 01

3467
31203
3467

Prod. 65 .90767

Example 2.
Multiply 36492
By .032

72984
109476

Product 1167 .744

Example 3.
Multiply .13461
By 42

26922
53844

Product 5 .65362

Example 4.
Multiply .1264
By .247

8848
5056
2528

Prod. .0312208

Example 5.
Multiply .01832
By .007

Prod. .00012824

Example 6.
Multiply .048
By .12

Product .00576

§. 11. *Diviſion.*

Diviſion is the ſame with that of whole Numbers; all the difficulty therefore is, to know how many Decimal places to prick off toward the Right-hand the Quotient: For which take this

Rule.] Take notice how many Decimal places you have in the Dividend, and how many in the Diviſor; and how many the Difference is; ſo many places muſt you prick off to the Right-hand of the Quotient: But if ſo many places are not in the Quotient, as the ſaid

ſaid Difference; make up the Number, by prefixing Cyphers toward the Left-hand.

Decimal Fractions may alſo be divided as Vulgar, *Sect.* 6. of this Chapter; as $\frac{25}{100}$ by $\frac{125}{1000}$ quotes $\frac{25000}{125000}$ or 6.

Example 1.] Divide 12.43210 by 9465. See the operation.

```
9.465) 12.43210 (1.31
       ...
       -------
         29671
       -------
         12760
       -------
Remains 3295
```

Note, that in this and moſt other Examples in Diviſion of Decimals, it will be neceſſary to place Cyphers toward the right-hand of the Dividend; and that you may know what number of Cyphers to put to the Right-hand of any Dividend, obſerve this

Rule.] Conſider how many Decimal places you would have in the Quotient, (as 3 is ſufficient, if it is not afterward to be multiplied by any thing) and alſo how many Decimal places you have in your Diviſor; and ſo many as you have in both, make ſo many Decimal places in the Dividend, by adding Cyphers, if need require; as in the Example in the Margent, where 3.46 is divided by 1.47; and becauſe I would have 3 Decimals in the Quotient, and there are 2 in the Diviſor, I muſt make 5 Decimal places in the Dividend:

```
1.47) 3.46000 (2.353
      ....
      -------
        520
      -------
        790
      -------
        550
      -------
      109 Remains;
```

Which being leſs than 1 Thouſandth part of a Unit, is not material. So much for Diviſion.

The Golden Rule is the ſame with that in whole Numbers, obſerving Multiplication and Diviſion of Decimals, as they are already taught.

Sect: 3.

Practice

A short way of Casting up all Sorts of Merchandise

The TABLE

The even pts of a l Sterl.g

l	d	l
10	0	½
6	8	⅓
5	0	¼
4	0	⅕
3	4	⅙
2	6	⅛
2	0	1/10
1	8	1/12

The even pts of a Shilling

d	
6	½
4	⅓
3	¼
2	⅙
1 ½	⅛
1	1/12

C.	q.	
10	0	¼
5	0	¼
4	0	⅕
2	2	⅛
2	0	1/10

of a Tun

l	
14	⅛
16	⅐

of a Dwt.

l	
14	¼
8	⅐
7	⅛

of ½ a Dwt.

l	
14	½
7	¼
4	⅐
3 ½	⅛

of ¼ a Dwt.

§. 1. *Rules of Practice.*

BEfore you enter upon theſe Rules following, it is neceſſary you ſhould have the foregoing Tables of the *Aliquot* parts of Money and Weight well fixed in your mind, and likewiſe the Table following of the 9 Digits multiplied by 12, which will enable you to multiply or divide any number by 12, as though it were but a Digit.

12 Times	1=12	12 Times	4=48	12 Times	7=84
	2=24		5=60		8=96
	3=36		6=72		9=108

As a neceſſary introduction to Practice, you are alſo to learn to divide a Number by any of the 9 Digits or 12, without putting down more Figures than the Number to be divided and the Quotient: For the Rules of Practice being of daily uſe with the Merchants, ought to be perform'd with all imaginable Brevity, I ſhall therefore give the following Examples, to inform the Learner how to take $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$, &c. of any Number, and then proceed to what I chiefly deſign in this Section; namely to ſhew how the value of any Quantity of Merchandize may be found with moſt diſpatch.

Admit then you would take half 3164: Say the two's in 3 is 1 (and the 1 over makes the next 1 Eleven) Two's in 11 is 5, and the 1 over makes the 6 16) Two's in 16 is 8, Two's in 4 is 2; ſo that the half of 3164 is 1582. Alſo by the ſame Rule $\frac{1}{5}$ of 18765 is 6255; $\frac{1}{13}$ of 46723 is 3893, and 7 remains; and $\frac{1}{10}$ of 47632 is 2381, if according to the third Caſe of the 5*th* Chapter, you cut off the Figure in Unit's place of the Dividend, and take $\frac{1}{5}$ the reſt: And in theſe Caſes, what remains, is always of the ſame Name with the Dividend.

$\frac{1}{2}$ of 3164

is=1582

$\frac{1}{5}$ of 18765

is=6255

$\frac{1}{13}$ of 46723

is=3893 =7 Rem.

$\frac{1}{10}$ of 47632
1

is=2381: 12 Rem.

Case 1.] When the Price of a Unit or Integer of a Commodity is 1 Shilling.

Rule.] Take $\frac{1}{20}$ of the given Number for the Answer, because 20 *s.* is 1 Pound.

Example.] What is 46743 Pound of Cotton-wool worth at 12 *d.* *per* Pound? See the operation.

$\frac{1}{20}$ of 46743

is 2337 *l.* 3 *s.* Answ.

Case 2.] When the Price of any Commodity is 2 Shillings.

Rule.] Take $\frac{1}{10}$ of the given Number, as in the third Example of the third Case of Chapter the Fifth. Or cut off Units place, so those Figures to the Left-hand are Pounds, and those to the Right, so many 2 Shillings.

19764 at 2 *s.*

1976 *l.* 8 *s.* *Facit.*

The Reason of this Rule.

Two Shillings is $\frac{1}{10}$ of a Pound; and to divide a Number by 10, is only to cut off Units place of the Dividend and Divisor, by which the Divisor will be but 1, and the Dividend less by the Units place cut off, as $\frac{10}{10}$ is equal to $\frac{1}{1}$, thus $\frac{10|0}{1|0}$: Now 1 being a Number which does not divide any other, therefore the Figures remaining of the Dividend to the Left-hand, must be the Answer in Pounds; and the Figure cut off in Units place being so many Two Shillings as the Digit denoteth, must therefore be multiplied by 2, to produce Shillings.

☞ By this Rule you have also the Reason of Reducing Shillings into Pounds, by cutting off Units place of the Dividend, and taking $\frac{1}{2}$ the rest for Answer; because 1 *s.* is $\frac{1}{2}$ of 2 *s.* or it is $\frac{1}{2}$ of $\frac{1}{10}$ of a Pound.

Example.] What the price of 19764 Yards at 2 *s*? See the Operation above.

Note, That what remains is always (as was said before) of the same Denomination with the Dividend; so that in the last Example, 4 remaining is 4 two Shillings, or 8 *s.*

Case 3. When the price of the Unit is any other even Number of Shillings under 20 *s.* take this.

Rule.] Take $\frac{1}{2}$ the price of the Integer, and by that multiply the Sum given, and the Product is Pounds; only when you multiply the

the first Figure toward the Right-hand, double the Excess of the Product above Ten or Tens for Shillings, and carry the said Tens to the Pounds, as in the Examples following.

The Reason of this Rule.

Is plainly deduced from the Common Rule of Multiplying any Number of Integers by the Value of 1 Integer, to give the price of all the Integers; and from the Rule for taking $\frac{1}{2}$ a number of Shillings (except Units place) for Pounds; for it produceth the same thing, if I take $\frac{1}{2}$ the Product of 2 Numbers multiplied together, as if I multiply one of the Numbers by $\frac{1}{2}$ the other, thus: If I multiply 640 by 6, $\frac{1}{2}$ the Product is 1920, equal to the Product of 640 by 3, which shews the Reason of Multiplying the Number given by $\frac{1}{2}$ the price of the Integer for the Answer in Pounds. And as for the Figure in Units place, which is, in this Case, always Shillings; the multiplying it by $\frac{1}{2}$ the price of the Integer, the doubling the Number above 10 or Tens in the Product for Shillings of the Answer *&c.* is the same as if you multiply the said Figure in Units place by the whole price of the Integer, and put the Shillings above or under a Pound in the Shillings place, and carry 1 *l.* for every 20 *s.* to the Pounds place, as in the following Example, if you multiply the 3 by 6 *s.* it produceth 18; and the other 3 Figures, multiplied by $\frac{1}{2}$ the price of the Integer, for the Reason aforesaid, produceth the Pounds, *viz.* 1296 *l.* 18 *s.*

Example 1.] What the price of 4323 Yards at 6 *s. per* Yard?
Work as in the Margent.

4323 Yards at 6 *s.*
l. 1296 : 18 *s.* Answ.

Example 2.] What the price of 16947 Yards, at 8 *s. per* Yard?
In this Example, say, 4 times 7 is 28, twice 8 is 16 *s.* and carry 2 *l.* 4 times 4 is 16, and 2 is 18; 8, and carry 1, *&c.*

16947 Yards at 8 *s.*
6778 *l.* 16 *s. Facit.*

Example 3.] What the price of 7943 Yards of broad Cloth at 18 *s. per* Yard?

7943 Yards at 18 *s.*
7148 *l.* 14 *s. Facit.*

Note, that from the Rule in this Case of an even number of Shillings, are excepted 10 *s.* and 2 *s.* For when the price of the Unit

Unit is 2 *s.* work as in the ſecond Caſe; and if the price of it is 10 *s.* take half the Integers given, becauſe there are twice 10 *s.* in a pound.

Example 4.] What the price of 369 Ells of *Holland*, at 10 *s. per* Ell?

369 Ells at 10 *s.*

184 *l.* 10 *s. Facit.*

Caſe 4.] When the given price of a Unit of any Wares or Commodity, is any odd Number of Shillings under 20.

Rule.] Work for the next even Number of Shillings, that are leſs than the ſaid odd Number, by the Rules in the laſt Caſe; and for the odd Shilling, work as in the firſt Caſe, and the Summ is the Anſwer in Pounds.

Example 1.] What is the price of 859 Yards of Muſlin at 17 *s. per* Yard? See the Margent.

859 Yards at 17 *s.*

	l.	*s.*		*s.*
Add	687	4	at	16
	42	19	at	1
	730	3	*Facit.*	

From this laſt Rule is excepted 5 *s.* For if the price of the Integer is 5 *s.* take $\frac{1}{4}$ of the given Number, becauſe 5 *s.* is $\frac{1}{4}$ of a Pound.

Example 2.] What is the price of 3743 *l.* of Coffee at 5 *s. per* Pound?

3743 *l.* at 5 *s.*

935 *l.* 15 *s. Facit.*

See the Work in the Margent; where obſerve, that the 3 remaining is 3 five Shillings, or 15 *s.*

Caſe 5.] When the price of the Integer is 1 *d.* or any other Number of pence, which are the *Aliquot*, or even parts of a Shilling.

Rule.] Divide the Number given by the ſaid part, and thoſe Shillings into Pounds by the firſt Caſe.

Example 1.] At 1 *d. per* Pound, what coſt 9764 ℔?

$\frac{1}{12}$ of 9764 ℔ at 1 *d.*

is 813 *s.* 8 *d.* Rem.

Facit 40 *l.* 13 *s.* 8 *d.*

Exam-

Example 2.] What coſt 13147 lb of damaged Raiſons, at 2 *d. per* Pound? Anſw. 109 *l.* 11 *s.* 2 *d.*

Or, take $\frac{1}{120}$ of the given number, by cutting off the Cypher, and you perform it at once.

$\frac{1}{6}$ of 13147 lb at 2 *d.* is 2191 *s.* 2 *d.*

Facit 109 *l.* 11 *s.* 2 *d.*

Example 3. What coſt 87341 Pound of Sugar at 3 *d. per* Pound.

Anſw. 1091 *l.* 15 *s.* 3 *d.*

Or, take $\frac{1}{10}$ of the given number, *viz.* $\frac{1}{5}$ of 2183.

$\frac{1}{4}$ of 87341 *l.* at 3 *d.* is 21835 *s.* 3 *d.* Rem.

Facit 1091 *l.* 15 *s.* 3 *d.*

Example 4.] What coſt 3097 Pound of Raiſons at 4 *d. per* Pound?

Anſw. 51 *l.* 12 *s.* 4 *d.*

Or, take $\frac{1}{60}$ of the given number.

See the Operation of each in the Margent.

$\frac{1}{3}$ of 3097 *l.* at 4 *d.* is 1032 *s.* 4 *d.* Rem.

Facit 51 *l.* 12 *s.* 4 *d.*

Example 5.] What coſt 14032 Pound of Sugar at 6 *d. per* Pound?

In this laſt Example of 6 *d.* you need only to take a fourth part of the given Number, except the Units place which you cut off, and you have the Anſwer 350 *l.* and the 32 Six-pences that remains are 16 *s.*

$\frac{1}{4}$ of 14032 *l.* at 6 *d.* Maketh 350 *l.* 16 *s.*

Caſe 6.] When the price of a Unit or Integer of any Commodity is any Number of pence under 12, that are not an even part of a Shilling; as 5 *d.* 7 *d.* 8 *d.* 9 *d.* 10 *d.* or 11 *d.* you are to work as in this and the following Caſes.

Example.] What coſt 34071 Pound of Figs at 5 *d.*?

Rule.] Becauſe 5 *d.* is a ſixth part of half a Crown, take $\frac{1}{2}$, and then $\frac{1}{6}$ of the Quotient for Pounds, as followeth:

$\frac{1}{2}$ 34071 *l.* at 5 *d.*

$\frac{1}{6}$ 5678 : 15 *d.* Remains.

Facit 709 *l.* 16 *s.* 3 *d.*

Caſe.]

Case 7.] When the price of the Unit of any thing is 7 *d.*

Rule.] Take first $\frac{1}{15}$ of the given Number, becauſe 80 Threepences make 1 *l.* then take $\frac{1}{60}$ of the given number, (becauſe 60 Groats make a pound Sterling) and add to the $\frac{1}{15}$, and the Sum is the Anſwer in pounds. See the Work following.

Example.] What coſt 321 Pound of damaged Cotton at 7 *d. per* Pound?

$\frac{1}{15}$ of 321 *l.* at 7 *d.*

Add { is 4*l.* 3*d.* Remains.
and $\frac{1}{60}$ is 5*l.* 7*s.* Remains.

Facit 9*l.* 7*s.* 3*d.*

Note, that the 1 remaining above the firſt Quotient, is 1 Threepence; and the 21 remaining above the ſecond Quotient is 21 Fourpences (by the Rules foregoing) or 7 *s.* ſo the Anſwer is 9*l.* 7*s.* 3*d.*

Case 8.] When the given price of a Unit or Integer is 8*d.*

Rule.] Take $\frac{1}{60}$ of the given Number, and put it down twice, and the Sum is the Anſwer in pounds.

Example, What coſt 3746 Yards of Ribbon at 8*d. per* Yard?

$\frac{1}{60}$ of 3746 Yards at 8 *d.*

Add { is 62*l.* 8*s.* 8*d.*
62*l.* 8 : 8

124*l.* 17 : 4*d.*

Case 9. When the given price of the Integer is 9*d.*

Rule.] Take $\frac{1}{240}$ of the given number, for 6*d.* and $\frac{1}{15}$ of it for 3*d.* and the Sum is the Anſwer in pounds.

Exam-

Example.] What coſt 4052 Buſhels of Coals at 9*d.* *per* Buſhel? The Operation followeth.

$\frac{1}{10}$ of 4052 at 9*d.*

is 101: 6*s.*
$\frac{1}{10}$ is 50: 13 } Add

Facit, 151*l.* 19

Caſe 10.] When the given price of the Unit or Integer is 10*d.*

Rule.] Take $\frac{1}{10}$ for 6*d.* and $\frac{1}{60}$ for 4*d.* of the Number given, and the Sum is the Anſwer in pounds.

Example.] What coſt 3179 Pound of Hops, at 10*d.* *per* Pound?

$\frac{1}{10}$ of 3179 at 10*d.*

is 79*l.* 9*s.* 6*d.*
$\frac{1}{60}$ is 52*l.* 19: 8 } Add

Facit 132*l.* 9: 2

Caſe 11.] When the given price of the Integer is 11*d.*

Rule.] From the given Number (ſuppoſing it Shillings) take $\frac{1}{12}$ thereof, and the Remainer is the Anſwer in Shillings; which bring into Pounds by Caſe the firſt.

Example.] What coſt 3470 Pound of Copper at 11*d.* *per* Pound?

$\frac{1}{12}$ of 3470*l.* at 11*d.*
is 289*s.* 2*d.* Deduct.

Rem. 3180*s.* 10

Facit 159*l.* 0: 10*d.*

Case 12.] When the given price of a Unit or Integer is Farthings under 4.

Rule.] Take the *Aliquot* parts of 1 *d.* or 1 *s.* and work for the ſhillings as before.

Example 1.] What coſt 19746 Yards of Tape, at 1 Farthing *per* Yard?

In this Example take $\frac{1}{4}$ for pence, $\frac{1}{12}$ for ſhillings, and $\frac{1}{20}$ for pounds.

$\frac{1}{4}$ of 19746 Yards at 1 Farthing

$\frac{1}{12}$ 4936 *d.* 2 *q.*

$\frac{1}{20}$ 411 *s.* 4 *d.*

Facit 20 *l.* 11: $4\frac{1}{2}$

Example 2.] What coſt 47390 Yards of Tape, at 2 Farthings *per* Yard?

In this Example take $\frac{1}{2}$ for pence, and proceed as in the laſt.

$\frac{1}{2}$ 47390 Yards at 2 Farthings

$\frac{1}{12}$ 23695 *d.*

1974 *s.* 7 *d.*

Facit 98 *l.* 14. 7

Example 3.] What coſt 41038 Yards of *Ditto*, at 3 Farthings *per* Yard?

In this Example, take $\frac{1}{2}$ for 3 Half-pences, $\frac{1}{3}$ of the 3 Half-pences for Shillings, *&c.*

$\frac{1}{2}$ 41038 Yards at 3 Farthings.

$\frac{1}{3}$ 20519 Three Half-pences.

2564 *s.* $10\frac{1}{2}$ *d.*

Facit 128 *l.* 4: $10\frac{1}{2}$

Case 13.]

Caſe 13.] When the price of the Integer is ſhillings and pence.

Rule.] Work for the ſhillings as is before directed, and alſo for the pence as before taught, and the Sum is the Anſwer in pounds. But if the pence given be an *Aliquot* part of the ſhillings given, you may take ſuch part of the Quotient for ſhillings, and the Sum of the Quotients is the Anſwer. Or if the ſhillings and pence together be an *Aliquot* part of a pound; take ſuch part, and you have the Anſwer at the firſt Operation in pounds.

Example 1.] What coſt 1914 Ells of Lockram, at 1 *s.* 8 *d. per* Ell?

Rule.] Take $\frac{1}{12}$ becauſe 1 *s.* 8 *d.* is $\frac{1}{12}$ of a pound.

$\frac{1}{12}$ of 1914 Ells at 1 *s.* 8 *d.*

Facit 159 *l.* 10 *s.*

Example. 2.] What coſt 2789 Ells of Bagg-holland at 3 *s.* 4 *d. per* Ell?

Rule.] Take $\frac{1}{6}$, becauſe 6 Three ſhillings Four-pences make a pound.

$\frac{1}{6}$ of 2789 Ells at 3 *s.* 4 *d.*

Facit 464 *l.* 16 *s.* 8 *d.*

Note, that the 5 remaining is 5 Three ſhillings 4 pences.

Example 3.] What coſt 978 Groſs of Buttons at 6 *s.* 8 *d. per* Groſs?

Rule.] Take $\frac{1}{3}$, becauſe 6 *s.* 8 *d.* is $\frac{1}{3}$ of a pound.

$\frac{1}{3}$ of 978 at 6 *s.* 8 *d.*

Facit 326 *l.*

Example 4.] What coſt 796 Ells of Dowlaſs, at 3 *s.* 10 *d. per* Ell?

Rule.] Take ½, as in the ſecond Example, for 3 *s.* 4 *d.* and $\frac{1}{20}$ for the 6 *d.* and the Sum of the Quotients is the Anſwer, as followeth.

½ of 796 Ells at 3 *s.* 10 *d.*

is 132 *l.* 13 *s.* 4 *d.* at 3 *s.* 4 *d.*
$\frac{1}{20}$ is 19 *l.* 18: 0 at 6 *d.*

Facit 152 *l.* 11: 4 *d.* for Anſwer.

Example 5.] At 17 *s.* 4 *d. per* Yard, what coſt 394 Yards of broad Cloth?

Rule.] Take for 17 *s.* as is before taught, and $\frac{1}{20}$ of the given Number for the 4 *d.*

394 at 17 *s.* 4 *d.*

315 *l.* 4 *s.* for 16 *s.*
19 *l.* 14 for 1 *s.*
$\frac{1}{20}$ is 6 *l.* 11: 4 *d.* for 4 *d.*
} Add

Facit 341 *l.* 9: 4

Example 6.] What coſt 1504 Ells of Cambrick at 19 *s.* 9 *d. per* Ell?

Rule.] Take for the 19 *s.* as is taught in ſhillings *per* Unit, and for the 9 *d.* as is directed in pence *per* Unit.

1504 Ells at 19 *s.* 9 *d.*

1353 *l.* 12 *s.* at 18 *s.*
75 *l.* 4 at 1 *s.*
37 *l.* 12 at 6 *d.*
18 *l.* 16 at 3 *d.*
} Add

Facit 1485 *l.* 4 *s.*

Note,

Note, That in this laſt Example, after you have done with the ſhillings, you may take $\frac{1}{2}$ of 75 *l.* 4 *s.* for the 6 *d.* becauſe 6*d.* is $\frac{1}{2}$ a ſhilling; and $\frac{1}{2}$ of 37 *l.* 12 *s.* for the 3 *d.* becauſe 3 *d* is $\frac{1}{2}$ of 6 *d.* which is ſomewhat more brief.

Example 7.] What coſt 1904 Ends of Fuſtian at 14 *s.* 10 *d.* *per* End ?

1904 at 14 *s.* 10 *d.*

1332 *l.* 16 *s.* at 14 *s.*
$\frac{1}{40}$ = 47 *l.* 12 at 6 *d.*
$\frac{1}{60}$ = 31 *l.* 14: 8 at 4 *d.* } Add

Facit 1412 *l.* 2 *s.* 8 *d.*

Example. 8.] What coſt 1865 Yards of Fuſtian at 2 *s.* 4 *d.* *per* Yard.

1865 at 2 *s.* 4 *d.*

186 *l.* 10 *s.* at 2 *s.*
31 *l.* 1: 8 *d.* at 4 *d.* } Add

Facit 217 *l.* 11: 8

Caſe 14.] When the given price of the Integer is Pence under 12, and Farthings under 4.

Rule.] Work for the Pence as is before taught; and if the Farthings are an even part of the Pence that you work'd for next before the Farthings, take ſuch part; otherwiſe work for the Farthings, as is taught before at Farthings *per* Unit.

Example 1.] What coſt 3471 Dozen of Buttons, at $3\frac{1}{2}$ *d.*

$\frac{1}{12}$ of 3471 at $3\frac{1}{2}$ *d.*

$\frac{1}{2}$ of 43 *l.* 7 *s.* 9 *d.* is 7 *l.* 4: $7\frac{1}{2}$ } Add

Facit 50 *l.* 12: $4\frac{1}{2}$.

Exam-

Example 2.] What cost 9761 Pounds of Sugar, at $5\frac{1}{4}d.$ *per* Pound?

$\frac{1}{100}$ of 9761 *l.* at $5\frac{1}{4}d.$

is 122*l.* 0*s.* 3*d.* at 3*d.*
$\frac{1}{25}$ is 81*l.* 6*s.* 10*d.* at 2*d.* } Add
of which $\frac{1}{8}$ is 10*l.* 3*s.* $4\frac{1}{2}$ at 1 *q.*

Facit 213*l.* 10: $5\frac{1}{4}$.

Example 3.] What cost 1794 Pounds of Pepper, at $3\frac{3}{4}d.$ *per* Pound?

$\frac{1}{100}$ of 1794 at $3\frac{3}{4}d.$

is 22*l.* 8*s.* 6*d.*
$\frac{1}{4}$ of the laſt Quote is 5*l.* 12: $1\frac{1}{2}$ at 3*q.* } Add

Facit 28 *l.* 0: $7\frac{1}{2}$.

Caſe 15.] When the price of the Integer or Unit is Pounds, Shillings, Pence and Farthings.

Rule.] Multiply the given Number by the Pounds, and to the Product add what the ſame comes to at Shillings, Pence, and Farthings, as is taught before.

Example.] What coſt 276 Hundred, 2 Quarters of Steel at 2*l.* 3*s.* $8\frac{1}{2}d.$ *per* Hundred?

For Anſwer: Firſt multiply the 276 by 2*l.* then for 3*s.* 4*d.* take $\frac{1}{6}$ of 276; for the 4*d.* take $\frac{1}{60}$ of it; and for the half penny, take $\frac{1}{8}$ of the laſt Quotient; and for the half Hundred, take $\frac{1}{2}$ of 2*l.* 3*s.* $8\frac{1}{2}d.$ which is 1*l.* 1*s.* $10\frac{1}{4}d.$ and the Sum of theſe is the Anſwer. See the Operation.

C.	Q.	
276:	2:	At 2*l.* 3*s.* $8\frac{1}{2}d.$

Add
552*l.* at 2*l.*
46*l.* at 3*s.* 4*d.*
4*l.* 12*s.* at 4*d.*
0*l.* 11: 6*d.* at 2*qrs.* which is $\frac{1}{8}$ of 4*l.* 12*s.*
1*l.* 1: $10\frac{1}{4}$ for the half Hundred.

Facit 604*l.* 5: $4\frac{1}{4}$.

§. 2. *Con-*

§. 2. *Concerning* Tare *and* Trett.

Tare is an Allowance in Merchandize made to the Buyer by the Merchant for the Weight of the Bag, Cask, Cheſt, Freal, Hogshead, *&c.* in which any Merchants Goods are put. After this Allowance is deducted from the Groſs-weight, which is the weight of the Commodity and Cask, Hogſhead, *&c.* together) the Remainer is the weight of the Commodity only, and is called Nett-weight: The allowance for *Tare* is various, as you ſhall ſee by and by.

Trett is an Allowance made for the Waſte, that may be mixt with the Commodity, as Duſt, Moats, *&c.* which is always 4 *l.* at 104; but though the Merchant alloweth this to the Retailer, yet himſelf is only allowed *Tare* in paying Cuſtom; ſo that he payeth as well for the Duſt as the beſt of the Commodity.

Note, that in ſuch Commodities wherein *Trett* is allowed, the Remainer after the *Tare* is deducted, is called *Suttle*; out of which *Suttle* the allowance for *Trett* is made; and when it is deducted, the Remainer is called *Nett*: but if no allowance is made for *Trett*, that weight is called *Nett*, that remaineth after the *Tare* is deducted, as was ſaid before: ſo that the *Tare* is always deducted from the Groſs weight, and the *Trett* from the *Suttle*: And to ſhew the beſt Method for diſcovering and deducting theſe Allowances, is the Work of this Section, and ſhall be explained in the Caſes following; wherein I ſhall be as plain as I can, becauſe I do not know anywhere the ſame is done already, with that brevity and perſpicuity which is neceſſary.

Caſe 1.] When the Allowance is 14 *l. per Cent.* (as of Almonds, Steel-Hemp) how to compute the Nett-weight.

This Caſe, as alſo the reſt, may be reſolved ſeveral ways; which after I have given you an Example of, I ſhall pitch upon that which, in my Opinion, is the brieſeſt.

Example 1.] What is the Nett-weight of 9 C. 2 *Qrs.* 7 *l.* Groſs, *Tare* at 14 *l. per Cent.* to be deducted?

The Firſt Way.

Rule.] Reduce the given Weight into Pounds, as in the third Example of *Caſe* 2. §. 2. *Chap.* 6. as followeth: Then ſay, as 112 lb

to

to 14 its *Tare*, ſo is the Pounds given to the Anſwer in *Tare*; which deduct from the Pounds Groſs, and the Remainer is Pounds Nett.

C.	*Qrs.*	lb
9:	2:	7
9		
93		
96		

1071 *l.* Groſs.

1071 *l.* Groſs.
Deduct 133¾ *l.* Tare.

Anſwer 937¼ *l.* Nett.

Groſs	Tare	Groſs.
112:	14:	1071
		14
		4284
		1071

112) 14994 (133 *l.* Tare.
...
379
434
98 Remains, or $\frac{98}{112}$ *l.* or ¾ of *l.* and better.

A Second Way of Working the laſt Queſtion.

Reduce the 2 Quarters 7 Pound into the Decimal of a Hundred, as is taught in Reduction of Decimals; then deduct 14 the *Tare* from 112, and the Remainer is 98: So muſt you multiply 9.563 *C.* by 98, and the Product is Nett-pounds required.

9.563 *C.* Groſs
98 Nett-pounds in 1 *C.* } Mult.

76504
86067
937.174

A Third

A Third Way of finding the Tare *and* Nett-weight *by Practice.*

Becauſe 14 *l.* is $\frac{1}{8}$ part of 112: take $\frac{1}{8}$ of the given Number, and you have the *Tare* ſought.

$\frac{1}{8}$ of 9 C.	2 *Qrs.*	7 lb	Groſs.
is 1:	0	21 $\frac{3}{4}$ lb	Tare, deduct.
Remains 8:	1;	13 $\frac{1}{4}$	Nett.

A Fourth Way of finding the Tare.

Multiply the Hundreds by the *Tare* to be allowed for 1 Hundred; and for the Quarters and Pounds in the Groſs-weight, take a proportionable part of the ſaid Allowance for 1 Hundred, and the Sum is the *Tare* in Pounds; which you may either Reduce into Hundreds, and deduct it from the Groſs-weight, or the Groſs-weight into Pounds, and then deduct the *Tare* in Pounds. C. *Q. l.*

So that to find what *Tare* is to be allowed for 9: 2: 7 Groſs.

Tare at 14 Pound, *per* 112:

	C.	Q.	l.	
Multiply {	9	2:	7	Groſs.
	14			

For 9 C. you have 126 *l.*
For 2 Quarters = 7 *l.* } *Tare.*
For 7 Pound = 0 $\frac{3}{4}$ *l.*

C. *Q. l.*

Tot. *Tare* = 133 $\frac{3}{4}$ *l.* or 1: 00: 21 $\frac{3}{4}$ *l.* The Anſw. as before.

This method (eſpecially where the *Tare* to be allowed *per Cent.* is not an aliquot part) of 112 *l.* is the moſt eaſy and expeditious; but the Learner may make uſe either of the 3d or 4th Way, as he beſt liketh: by both which Methods, the following Caſes are wrought.

Caſe 2.] When the Allowance for Tare, is 4 *l. per* Hundred Weight, as for Cotton, Wool, Hops, Feathers, Lambs-Wool, or Poliſh.

Rule.] Take $\frac{1}{7}$ of $\frac{1}{4}$ of the Groſs weight, and you have the Tare: which deduct from the Groſs, and the remainer is the Nett required.

Example.] What is the Nett-weight of four Sacks of Cotton, Wool; whose Number and Weight is as followeth:

N°	C.	Q.	l.
31	1:	3:	19
35	2:	2:	07
36	3:	0:	14
40	2:	1:	12
Total Gross	9:	3:	24

Multiply { 9 3 24 / 4 }

Tare { *l.* 36, for 9 *C.* / *l.* 3, for 3 *qrs* / *l.* $0\frac{3}{4}$, for 24 *l.* } Gross.

l. $39\frac{3}{4}$ Total Tare.

at 4 *l. per Cent.*

2: 1: 27 is $\frac{1}{4}$; of which take $\frac{1}{7}$.

$\frac{1}{7}$ is 0: 1: $11\frac{1}{4}$ The Tare, deduct.

Remains 9: 2: 13 Nett.

Note, that what Hundreds remains in dividing, must be reduced into Quarters of Hundreds; and what Quarters remains, must be reduced into Pounds, and then divided; so in taking $\frac{1}{4}$ of 9 Hundred (in the Example toward the Left-hand) 1 Hundred remains, or 4 Quarters; which, added to the 3, is 7 Quarters; $\frac{1}{4}$ of which is 1 Quarter, and 3 remains; or 84 Pound, and the 24 is 108 Pound; $\frac{1}{7}$ of which is 27.

Case 3.] When the Tare to be allowed is 6 *l. per* Hundred Weight.

Rule.] Take $\frac{1}{4}$ of the given Number, and $\frac{1}{7}$ of that fourth for 4 Pound Tare: then to the last Quotient add half it self and the Sum is the Tare required.

Or, as in the 4th Method: Multiply the Hundreds by 6; and so proceed as in the 4th Way of finding the Tare is directed, and in the Example.

Example.] What is the Tare of 6 Casks of Lattino r Iron Wyre, at 6 *l. per* Hundred Tare?

By

By the 4th Way (by which this is beſt performed.)

C. Qrs. l.

The Groſs-weight being 16: 00: 14

6

l. 96 is the Tare of 16 C.
0¾, of 14 *l.* (¾ *l.* being ⅛ of 6 *l.* as 14 *l.* is ⅛ of 112 *l.*)

Total Tare = 96¾ *l.*

Caſe 4.] When the Allowance for Tare is 7 *l. per Cent.*

Rule.] Take ⅛ of 1 eight of the given Number for Tare.

Example.] What is the Tare of 9 C. 3 *Qrs.* 16 *l.* at 7 *l. per* Hundred Weight. See the Work following.

C. Qrs. l.
9: 3: 16 at 7 *l.* Tare.

1: 0: 26 is ⅛

Deduct 0: 2: 13 is ½ of ⅛ being the Tare.

Remainer 9: 1: 03 Nett.

Or by the 4th Method

Mult. *C. Q. l.*
9: 3: 16 at 7 *l.*

7

For 9 C. = 63 *l.*
For 3 *qrs.* = 5¼ *l.*
For 16 *l.* = 0¾ *l.*
} Tare.

69 *l.* Total Tare.

Caſe 5.] When the Allowance for Tare is 8 *l. per* Hundred Weight, as for Copper and Brimſtone,

Rule.] Take ⅛ of a fourth of the given Number, and put it down twice, and the Sum is Tare.

Example.] What is the Tare of 3 Fatts of Copper, *viz.*

N°	C.	Qr.	l.
7,	19:	1:	06
9,	21:	3:	04
13,	23:	2:	14

C. 64: 2: 24 = Total Groſs.

C. 16: 0: 20 = ¼ of the Grs.

2: 1: 06¾ = ⅛ of the 4th. } Add
2: 1: 06¾ = ⅛ of the 4th. }

4: 2: 13½ = Tot. Tare.

Or by the 4th Way.

C. 64: 2: 24 Groſs.

8

512 *l.* Tare of 64 C.
4 *l.* Tare of the 2 *qrs.*
1½ *l.* Tare of the 24 *l.*

517½ Tare of the Tot. Groſs, or C. 4: 2: 13½ as before.

Case 6.] When the Allowance for Tare is 10 Pound *per Cent.*

Rule.] From $\frac{1}{7}$ of the Groſs-weight, take $\frac{1}{7}$ of $\frac{1}{4}$ of the ſaid Weight, and the Remainer is Tare.

But this Queſtion is beſt performed by the 4th Way.

Example.] What is the allowance for 14 C. 1 *Quar.* 10 *l.* of Copperas, at 10 Pound *per* Hundred Tare?

C.	Q.	l.
14	1	10
10		

l. 140 Tare of 14 C.
l. $2\frac{1}{2}$, of 1 *qr.*
l. $0\frac{1}{4}$ of 10 *l.*

$143\frac{1}{4}$ = Tare required.

Case 7.] When the Allowance for Tare is 12 *l. per Cent.* as of Allum, Salt-petre and Tallow.

Rule.] From $\frac{1}{7}$ of the Groſs weight, take $\frac{1}{7}$ of the Eighth, and the Remainer is Tare.

Example.] What is the Tare of 15 C. 3 *Q.* 16 *l.* of Salt-petre, at 12 *l. per Cent.*

	C.	Q.	l.
Groſs	15:	3:	16 at 12 *l. per Cent.*
	1:	3:	26 is $\frac{1}{7}$ of the Groſs.
	0:	1:	04 is $\frac{1}{7}$ of the 8th, which deduct from the $\frac{1}{7}$.
	1:	2:	$22\frac{1}{7}$ Tare required, deduct from the Groſs.
Remains	14:	0:	22 Nett.

Case 8.] When the Allowance for Tare is 16 *l. per Cent.*

Rule.] Take $\frac{1}{7}$ of the given Number: (this being done beſt by the 3d Way) and you have the Tare.

Exam-

Example.] What is the Tare of 10 C. 2 *Q.* 26 *l.* of Currans, at 16 *l. per Cent.*

	C.	Q.	l.	
Groſs	10	2	26	at 16 *l.* Tare.
	1	2	3	
Nett	9	0	23	

Thus have I given you Rules for deducting the uſual Tares in moſt Commodities, where 112 lb is allowed to the Hundred Weight; which Methods I referr to the Learner, as the beſt, being brief and commendable according to the Rules in Practice among the beſt Merchants; but if the Learner thinks the foregoing Method charges his Memory too much, he may uſe the following Table of the Decimal parts of 112 *l.* by which he will work Quarters of Hundreds and Pounds, as though they were Hundreds, as ſhall be ſhewed by ſeveral Examples following the Table.

A TA-

A TABLE *for the speedy finding the Tare; Shewing what Decimal part of One Hundred any Number of Pounds are.*

Qr.	lb	*C.*	*Qr.*	lb	*C.*	*Qr.*	lb	*C.*	*Qr.*	lb	*C*
0	1	.0089	1	0	.25	2	0	.5	3	0	.75
	2	.0178		1	.2589		1	.5089		1	.7589
	3	.0267		2	.2678		2	.5188		2	.7679
	4	.0357		3	.2767		3	.5277		3	.7768
	5	.0446		4	.2857		4	.5367		4	.7857
	6	.0535		5	.2946		5	.5456		5	.7946
	7	.0624		6	.3035		6	.5545		6	.8036
	8	.0714		7	.3124		7	.5634		7	.8125
	9	.0803		8	.3214		8	.5724		8	.8214
	10	.0892		9	.3303		9	.5813		9	.8303
	11	.0982		10	.3392		10	.5902		10	.8393
	12	.1071		11	.3481		11	.5991		11	.8482
	13	.1161		12	.3570		12	.6081		12	.8571
	14	.1250		13	.3660		13	.6170		13	.8660
	15	.1339		14	.3749		14	.6259		14	.8750
	16	.1429		15	.3838		15	.6348		15	.8839
	17	.1518		16	.3927		16	.6438		16	.8928
	18	.1607		17	.4017		17	.6527		17	.9017
	19	.1697		18	.4106		18	.6616		18	.9107
	20	.1786		19	.4195		19	.6705		19	.9196
	21	.1875		20	.4284		20	.6795		20	.9285
	22	.1964		21	.4374		21	.6884		21	.9374
	23	.2054		22	.4463		22	.6973		22	.9464
	24	.2143		23	.4552		23	.7062		23	.9553
	25	.2232		24	.4641		24	.7152		24	.9642
	26	.2321		25	.4731		25	.7241		25	.9731
	27	.2411		26	.4820		26	.7330		26	.9821
				27	.4919		27	.7410		27	.991

The Calculation of this Table.

This is no more than what is taught in Example 4. of Section 7. of Chapter 8. of this Book.

Example.] Admit I would know what Decimal part of a Hundred 2 Quarters 27 Pound is. In

In 2 Quarters 27 Pound are 83 Pound, or $\frac{83}{112}$ *C.* which by the Rule in the ſaid ſeventh Section of Chap. 8. Example 1. is thus reduced to a Decimal.

112: 83:: 10000
83
———— *C.*
112) 830000 (.7410 Anſwer.
....
———
460
———
120
———
80

By the Work you may ſee that the 2 Quarters 27 Pound is .7410 *C.* and is the Tabular Number, anſwering 2 Quarters 27 Pound; the Uſe of the Table in Allowance for Tare is as followeth.

The Uſe of the Table foregoing.

Example 1.] What is the Nett-weight of the 4 Sacks of Cotton mentioned in Caſe 2 of this Section, the Groſs-weight of which is 9 Hundred, 3 Quarters 24 Pound.

Rule.] Take the Decimal of 3 Quarters 24 Pound out of the Table which is .9642. Then deduct 4 Pound Tare from 112, and the Remainer is 108 Nett pounds in 112 Groſs, as we ſhewed before: Therefore multiply 9.9642 *C.* by 108, and the Product is Nett-pounds, and parts of a Pound.

9.9642 *C.*
108
———
7.97136
9.9642
———
1076.1336 Nett-pounds for Anſwer; which is the ſame as in the ſaid ſecond Caſe of this Section, as you may prove by reducing that Nett-weight into pounds.

Exam.

Example 2.] Let it be required to find the Nett-weight of the 10 Hundred, 2 Quarters, 26 Pound of Currans mentioned in *Case* 8. foregoing.

In order to perform which, I look in the Decimal Table, what part of 1 Hundred, 2 Quarters and 26 Pound is, and find it .733; and having deducted the 16 Pound Tare from 112, the Remainer is 96; wherefore I multiply 10.733 by 96, and the Product is Nett-pounds.

10.733 Hundred
96 Nett-pound in 1 C. } Multiply

64398
96597

1030.368 Nett-pounds, which is equal to the Pounds contained in 9 Hundred, 00 Quarters, 23 Pound the Nett-weight of the Currans in the said 8th Case.

Case 9.] When the Hundred weight is 5 Score, how to deduct the Tare at 5 *l. per Cent.*

Rule.] Take $\frac{1}{20}$ of the given Number, and you have the Tare required.

Example 3.] What is the Tare of 5 Bags of Cotton-yarn from *Aleppo*, Weight 1099 Pound at 5 *l. per Cent.*

lb
$\frac{1}{20}$ of 1099 Gross

is 54 *fere* for Tare.

1045 Nett.

By the various Examples in the Cases foregoing, you may easily know how to make Allowance for Tare at any rate *per Cent.* but in many Commodities the Allowance for Tare is not reckoned *per Cent.* but so much of the Gross, called Invoice-Tare, thus:

Case 10.]

Case 10.] When the Tare of Raw-Silk from *Smyrna* or *Cyprus* is to be deducted, the

Rule.] Is (by the Book of Rates) to allow 16 Pound Tare for 3 Hundred Weight and upward; from 3 Hundred Weight, down to 200 Weight 14 Pound Tare; and from 200 Weight downwards, is allowed 12 Pound Tare.

Example 1.] What is the Tare of 4 Bails of Raw-Silk, Weight 1088 Pound (Averdupoize?) Answer 58 Pound.

	lb	lb
N° 1	*Qr.* 346,	Tare 16
3	300,	Tare 16
4	284,	Tare 14
8	158,	Tare 12
Total Gross	1088	Tare 58
	58	
Remains lb	1030	Nett.

Example 2.] Likewise in *Virginia* Tobacco, all Hogsheads under 3 Hundred Weight, allow 70 Pound Tare, from 3 Hundred to 4 Hundred 80 Pound, from 4 Hundred to 5 Hundred 90 Pound, and from 5 Hundred Weight upward 100 Pound Tare.

So in the 6 Hogsheads following, Weight 27 Hundred, 1 Quarter, the Tare is 4 Hundred, 3 Quarters, 8 Pound.

	C.	Q.	lb		C.	Q.	lb
N° 5	2:	3:	4,	Tare	0:	2:	14
6	3:	1:	12,	Tare	0:	2:	24
8	4:	2:	00,	Tare	0:	3:	06
9	5:	1:	12,	Tare	0:	3:	16
10	5:	2:	08,	Tare	0:	3:	16
12	5:	2:	20,	Tare	0:	3:	16
Total Gross	27:	1:	00,	Tare	4:	3:	08
Total Tare	4:	3:	08,	Deduct			
Resteth Nett	22:	3:	20				

It would be needleſs to give any more Examples of the deducing Tare, ſince by knowing the uſual Tare for any Commodity according to the Cuſtom of any Port, the Learner may by the help of the foregoing Rules be able with Speed and Exactneſs to make any Allowance deſired. I ſhall therefore conclude this Section with one Example of Allowance for Tare and Trett.

Caſe 11.] When allowance is required for Tare and Trett.

Rule.] Find what is to be allowed for Tare according to the Rules foregoing, which having deducted, the Remainer (as was ſaid at the beginning of this Section) is Suttle, which reduce into Pounds and divide by 26 (becauſe that is $\frac{1}{4}$ part of 104) and the Quotient is what is to be allowed for Trett, which deduct from the Suttle and the Remainer is Nett.

Example.] What is the Nett-weight of the Puncheon of Pruons following, Allowance being made of 14 Pound at 112 for Tare, and 4 Pound at 104 for Trett?

C. Q. l.

1 Puncheon at 9: 2: 10 Groſs at 14 Pound Tare *per Cent.*

$\frac{1}{7}$ is 1: 0: 22 Tare deduct

Remains 8: 1: 16 Suttle

8
84
84

940 Pound Suttle, which divide by 26, and you have
36 Pound Trett, deduct

904 Pound Nett, For Anſwer.

Note, that Trett, and 2 Pound at every 300 Weight for Draught, is uſually allowed in the Port of *London* for Cinamon, Cloves, Mace, Tobacco, Cotton, Yarn, Cotton-wool, and other things that have Waſte.

§. 3. *Con-*

§. 3. *Concerning Bartering.*

Merchants are ſaid to Barter, when they Exchange one Commodity for another; but there is much more difficulty in the Name, than the Rule; for that is no other than the Rule of Proportion which has been taught already, as will appear by the Example following.

Caſe 1.] When two Merchants Barter, and each rateth his Goods ſold in Barter, as though they were ſold for Ready money.

Rule.] Let one Merchant conſider what the Goods he is minded to Barter amounteth to: Then, by the Rule of Proportion, ſee how much of the other Merchant's Commodity the ſaid Amount will buy, and ſo much muſt be given.

Example.] A Merchant has 18 Hundred 2 Quarters of Coffee-berries at 14 Pound 10 Shillings *per Cent.* which he is willing to Barter with another Merchant for Lime-juice at 20 Pence the Gallon; how much Lime-juice muſt the ſecond Merchant give the firſt for his Coffee-berries?

The Price of the firſt Merchant's Coffee is thus by Practice.

C. Q. l. s.
18: 2 at 14: 10 *per Cent.*
14
72
18
252 Pound at 18 *l.*
9 *l.* at 10 *s.*
7 *l.* 5 *s.* for the half Hundr.

The Value of the Coffee 268 *l.* 5 *s.*

d. Gal. l. s.
20: 1:: 268: 5
20
5365
12
20.) 64380 *d.* (3219 Gall. Anſwer.

By the Work I find, that if 20 Pence buy one Gallon of Lime-juice, 268 *l.* 5 *s.* or 6438 *d.* will buy 3219 Gallons: and ſo much muſt the ſecond Merchant give the firſt for his Coffee berries.

Caſe 2.] When two Merchants Barter, and the one rateth his Goods above the common Price for Ready Money, to know how the other Merchant may advance the Price of his Goods in proportion to the firſt Merchant, and how to Barter without Loſs thereby.

Rule.] Conſider what the firſt Merchant's Goods are worth *per* Integer in Ready Money, and how much he advanceth the Price in Barter; then ſay, if the Price of a Unit of the firſt Merchant's Commodity advance ſo much in Barter (mentioning the difference between his Ready Money and Bartering Prices) how much muſt the Price of a Unit of the ſecond Merchant's Commodity advance above the Ready money rate in Barter: which having found, Work according to the Bartering Prices of each, as in the laſt.

Example.] A Merchant hath 15 Hundred, 1 Quarter of *Alleppo*-Gauls, which he valueth at 5 Pound 6 Shillings 8 Pence *per* Hundred Ready Money; but in Barter he will have 5 Pound 10 Shillings *per* Hundred. Another Merchant hath *Jambee*-Pepper at 14 Pence the Pound Ready Money; how much Pepper muſt the ſecond give the firſt for his Gauls, advancing his price in Barter proportionably. Anſwer, 1394$\frac{66}{111}$ Pound of Pepper. See the Operation.

l.	*s.*	*d.*		*s.*	*d.*		*d.*	
5:	6:	8:		3:	4::		14	
20				12			40	
106 Shill.			*d.*	40	*d.*	560		
12							4	
1280 *d.*			1280)		2240	*Qrs.*	*Q.* (1$\frac{96}{111}$	or 1$\frac{3}{4}$ *Qrs.*
					96			

Here you ſee, that if 5 *l.* 6 *s.* 8 *d.* (or 1280 *d.*) advance 3 *s.* 4 *d.* in Barter; then 14 *d.* muſt advance 1$\frac{3}{4}$ Farthing. So that now the Gauls being 5 *l.* 10 *s.* or 1320 *d. per* Hundred, the Pepper is to be reckoned 14 *d.* 1$\frac{3}{4}$ *per* Pound.

Then

Then find the Value of the Gauls by adding the Pence in 3 *s.* 4 *d.* to the foregoing 1280 *d.* which maketh 1320 *d.* by which multiply 15 Hundred 1 Quarter (or 15.25, the Decimal of 1 Quarter being .25) and the Product is the Value of the Gauls 20130 *d.* then find the Answer to the Question by the following Proportion, *viz.* If 14 *d.* $1\frac{3}{4}$ *qrs.* buy 1 Pound of Pepper; how many will 20130 *d.* buy?

d.	*q.*	*l.*	*d.*	
14 :	$1\frac{3}{4}$:	1 : :	20130 :	15.25 C.
4			4 Farthings,	1320 *d. per C.*
$57\frac{3}{4}$ *qrs.*			80520 Farth.	3050
				4575
				1525
				20130.00 *d.*

Or $\frac{231}{4}$ *qr.* By the First Case of Reduction of Vulgar Fractions.

Then by Division of Vulgar Fractions

$\frac{231}{4}$) $\frac{80520}{1}$ ($\frac{322080}{231}$ Answer.

Which by the second Case of Reduction of Vulgar Fractions is $1394\frac{66}{231}$ Pound of Pepper, and so much must be given for the Gauls.

§. 4. *Concerning Exchange of Coin.*

IN this Section I shall endeavour, with what Brevity I can well to take notice of several things, which other Authors, treating on this Subject have omitted; But which, I presume will be very practical and useful; and in doing thereof, shall discourse on these Heads.

1. What Exchange is.
2. The Subject of Exchange.
3. The Par of Exchange.
4. The Course of Exchange.
5. Some Reasons of the Rise and Fall of Exchange.
6. Give some Rules for keeping the Course near the Par.

I. Exchange of Things, is to give one thing for another; which is likewise called Barter or Commutation; But there the things exchanged

exchanged are always of a different Specie, as Wool for Cloth, Silk, for Stuff, *&c.* and when one is received, the other is delivered; or in ordinary Buying and Selling, Money is given for Goods, or Goods for Money; which is sometimes given the one immediately for the other; and sometimes, contrary to the former, the Money is paid by Contract a certain time after the Goods are delivered, which is called Buying or Selling on Credit, or at Time: But Exchange (according to the ordinary Notion in Merchandizing) is to give Coin for Coin, *i.e.* the giving a Sum of Money in one place for a Bill, ordering the payment of the like Sum (according to the Value agreed on) in another place. Now so often as these two places are in different Countries, the Exchange is Foreign, otherwise Inland; of which, and of several Customs used among Merchants, with respect to Drawing and Accepting these Bills, and paying and receiving the Value therein, you have a large account in Section the 1st of Chap. 11.

II. Money (the Subject of Exchange) and Commerce are now inseparable Companions; (of which we had too great assurance in the late Revolution of Coin, where Trade decreased, as the Quantity of running Cash;) though, according to the Opinion of the Ingenious, Trade was first carried on without Money, every one being willing to give such Commodities as they were possessed of, for those of which they stood in need.

2. But because, by this means, Men could not at all times fit others occasions, it became necessary that the Receiver should deposit a Pledge with the Deliverer to supply his need on the like occasion. And the most proper Material for that was found to be Silver, because of its great Value among Men, not only by reason of its Natural perfections, as Cleanness, Unaptness to Rust, Ponderousness, *&c.* but also of its being less common than other Metals, which gave it a just Esteem among Traders, and was therefore pitch'd upon to be a Universal Pledge or Measure of all Commerce and Traffick which we find, in Sacred History, was so about 488 Years after the Flood.

3. But, to prevent the Receiver of this Silver being imposed on by the Deliverer incorporating too great a Quantity of a Baser sort of Metal with his Silver, (which is not easily discovered by the Eye) it became necessary the Fineness of Silver should be ascertained by every Government, and to have certain Quantities at certain Values.

4. And

4. And to ſave the trouble of Weighing and Eſſaying every Piece received, which would greatly obſtruct the diſpatch of buſineſs, by which Men ordinarily grow Rich: It became cuſtomary for Princes to cauſe ſuch and ſuch Stamps to be given to the ſeveral Denominations or Quantities of Silver to be a Voucher of the Weight and Fineneſs thereof, which was called Coin, *Moneta* or Money, and is the Condition we have it in at this day; the Antiquity of which Stamping Money, we can trace back no farther than the *Romans* time, among whom the Ingenious Mr. *Vaughan* of *Greys-Inn* tells us from the *Roman* Hiſtory, *Servius Tullius* was the firſt.

5. I proceed now to ſhew the Weight and Fineneſs of our own Coin here in *England*, and ſhall, in the next Article or Head, ſhew how the Coin of other Nations agrees in Value thereto; as being ſomething more brief and leſs troubleſome for the Reader to apprehend, than to inſert the Weight and Fineneſs of Foreign Coin, which I have done elſewhere.

6. Fine Silver being too Flexible for common uſe either in Money or Utenſils, made it neceſſary to harden the ſame by mixing a ſmall quantity of baſer Metal therewith, as Copper or Braſs; which is therefore called Allay; and Money is ſaid to be more or leſs fine in proportion to the quantity of Allay intermixed with a certain quantity of fine Silver: Thus of a Pound of Bullion; if 2 Ounces thereof be Copper, *&c.* the Bullion is ſaid to be 10 Ounces fine, and is not ſo valuable as that which is 11 Ounces fine, *i. e.* that has but 1 Ounce of Allay in it.

7. Hence it is evident, that Engliſh Silver being 11 Ounces 2 *dw.* fine. *i. e.* having but 18 *dw.* of Allay in 12 Ounces of Bullion, a Pound thereof is more valuable than a Pound of that which is but 9 Ounces fine, as the Dutch; or 10 Ounces fine, as the French, *&c.*

8. Engliſh Silver is called Sterling (as moſt believe from the Name of the firſt Coiners thereof, who were ſent for from the Eaſterly parts of *Germany* by King *Richard* the Firſt, and were called *Eaſterlings.*) And all *Bullion*, having but 18 *dw.* of Allay in 12 Ounces of Bullion is ſaid to be Sterling fine.

9. The Fineneſs of Engliſh Gold is diſtinguiſhed or aſcertained by the Carat, *viz.* 12 Ounces of Bullion is divided into 24 equal parts, each of which is 1 Carat, and each Carat into 4 Grains; of which 24 Carats, 2 are Silver and Copper Allay; ſo that there is 22 Carats of fine Gold, and 2 Carats of Allay to the Standard of Gold in *England*, which is 22 Carats fine.

10. En-

10. Engliſh Gold and Silver are weighed by *Troy* Weight, *viz.* Pounds, Ounces, dw. (or Penny Weights) and Grains; and according to the common price of Gold and Silver Bullion at preſent (which on extraordinary occaſions does ſomething riſe and fall, but not as other things do) the Weight and Value is as follows.

Of Silver Bullion.

	l.	*s.*	*d.*	*qr.*
The Grain	=00 :	00 :	00 :	$00\frac{1}{2}$
D. weight	=00 :	00 :	03 :	00
Ounce	=00 :	05 :	00 :	00
Pound	=03 :	00 :	00 :	00

Of Gold Bullion.

	l.	*s.*	*d.*
The Grain	=00 :	00 :	02 —
D. weight	=00 :	04 :	00 —
Ounce	=04 :	00 :	00 —
Pound	=48 :	00 :	00 —

11. Having ſhewed the Value of the ſeveral Denominations of weight of Bullion: I come next to ſhew the Value, Fineneſs and Weight of our Silver and Gold Coin, *viz.*

Silver Coin Calculated according to the Standard of the Mint, (12 Ounces of Bullion being Coined into 62 *s.* at which rate the Crown Piece is 19 dw. 8.5161290322 5, *&c.* Grains) is as follows.

Current Value of Coined Pieces.	*Value as Bullion at* 5 *s.* per *Ounce.*	*Weight of Coined Pieces.*	*Fineneſs.*
s. *d.*	*s.* *d.* *qr.*	*dw.* *gr.*	
5 : 00	4 : 10 : $0\frac{1}{4}$	19 : $08\frac{2}{3}$	
2 : 06	2 : 5 : $0\frac{1}{2}$	9 : $16\frac{1}{4}$	
1 : 00	0 : 11 : $2\frac{9}{10}$	3 : $20\frac{9}{10}$	$\frac{2}{3}$ *dw.*
0 : 06	0 : 05 : $3\frac{9}{40}$	1 : $22\frac{9}{20}$	> 11 : 02
0 : 04	0 : 03 : $3\frac{29}{40}$	1 : $06\frac{29}{40}$	
0 : 03	0 : 02 : $3\frac{49}{80}$	0 : $23\frac{9}{40}$	
0 : 02	0 : 01 : $3\frac{89}{120}$	0 : $15\frac{29}{60}$	
0 : 01	0 : 00 : $3\frac{209}{240}$	0 : $07\frac{89}{120}$	

Gold

Gold Coin Calculated according to the Standard of the Mint 12 Ounces of Bullion being Coined into 44½ Guineas; at which rate the Guinea will weigh 5 *dw.* 9.4382, &c. Grains; and the other Pieces are for Weight and Value, according to the subsequent Table.

Pieces.	*The Current Value of Coined Pieces.*	*Value at Standard Rate.*	*Value as Bullion at 4 l. per Ounce.*	*Weight of Coined Piece.*	*Fineness*
	l. s. d.	l. s. d.	l. s. d. qr.	℥ dw. gr.	
The Guinea	1:02:00	1:00:00	1:01:06:3½	0 05: 09⅔	
The 5 Guin. Piece	5:10:00	5:00:00	5:07:10:1½	1:06:23	22 Carats or 11℥
The half Guin. (& qr. in propor.	0:11:00	0:10:00	0:10:09:1½	0:02:16,⅞	
Car. or *Jac.* broad 20 *s.* Pieces.	1:04:00	1:00:00	1:03:00---	0:05:18	
Jacobus broad 22 *s.* Pieces	1:06:00	1:02:00	1:05:00---	0:06:06	

There are oth er Denominations of Engliſh Gold, as the Angel Gold, or Roſe Nobles, 23 Caracts, 3½ Grains fine; and the Pieces of different Weight, from 8 *dw.* 6 *gr.* to 9 *dw.* 18, as alſo the Soveraign Gold, or 20 *s.* Pieces of *H.* 8. but 20 Caracts fine, which I think it not proper to ſay more of, there being few or none to be ſeen Currant now.

12. There are alſo made Currant the French and Spaniſh Piſtols, about as fine as Crown Gold, and the weight being 4 *dw.* 8 *gr.* the value thereof, at 4 *l.* the Ounce, is 17 *s.* 4 *d.* each, tho' they have through cuſtom long paſſed currant among us for 17 *s.* 6 *d.* and at preſent for 18 *s.* each.

13. There might ſeveral uſefull Obſervations be drawn from the two foregoing Tables: as that Gold and Silver are dearer in the Coin than in the Bullion at the preſent price thereof; and conſequently, that if there were no Laws againſt it, it's againſt any ones Intereſt to tranſport or melt the Coin down. 2. That the late Regulation of our Coin has brought Bullion to theſe Rates, it being much dearer before. 3. That Gold and Silver Bullion is as cheap now, as it has been this many years paſt, and conſequently, that there is no more reaſon for altering the Standard of our Coin now, than there was 40 years ago. 4. That at the Rate or Proportion of Guineas

Paſſing currant at 22 *s.* each;

	l.	*s.*	*d.*
Piſtoles ought to go for	17	8	
20 *s.* broad Gold, at	28	6	¼
22 *s.* broad Gold, at	25	7	

which is leſs than the currant Value of theſe Pieces, as in the firſt Column toward the Left-hand of the preceding Table doth appear. But theſe, with many other Remarks that may eaſily be made, I leave to the Ingenious, the deſign of this work not admitting me to make any farther Excurſion.

14. They that conſider the proportion between Gold and Silver (which may likewiſe be gathered from the foregoing Tables) ought neceſſarily to mention whether the Analogy of Weight (Bulk for Bulk) or of Value, and at what Price they rate each; and whether that price be of fine Gold or fine Silver, or alloy'd; and whether they mean the Price as Bullion at preſent, or at the Standard Rate, otherwiſe their Calculation muſt be uncertain, and they leave the Reader in the dark; therefore to make this matter plain, I have inſerted the Proportions following, being all the Caſes I could think uſeful.

1. The Weight of fine Silver to that of fine Gold (Bulks alike) is,

As 1 to 1.83896, *&c.*

2. Fine Silver to fine Gold, calculated from the Standard Rate, the Pound of fine Gold being worth 48 *l.* 10 *s.* 10 *d.* and fine Silver 3 *l.* 6 *s.* 11¼ *d.* is,

As 1 to 14.49, *&c.*

3. Standard Sterling Silver to Standard Crown Gold at Standard Value of 44 *l.* 10 *s.* the Pound of Gold, and 3 *l.* 2 *s.* the Pound of Silver is,

As 1 to 14.354, *&c.*

4. Sterling Silver at 5 *s.* the Ounce of Crown Gold at 4 *l.* the Ounce, is,

As 1 to 16.

5. Sterling Silver to Crown Gold, according to the now currant Value of Silver and Gold 129.4 Grains of Gold paſſing currant for 22 *s.* and 19 *dw.* 8½ Grains of Silver running at 5 *s.* is,

As 1 to 15.79032, *&c.*

6. Fine Gold to Crown Gold, is in Value,

As 1 to .9167, *&c.*

7. Fine

7. Fine Silver to Sterling Silver, is in Value,
As 1 to .9260, *&c.*

And from theſe ſeveral proportions may be deduced many uſeful things relating the Weight, Fineneſs and Valuation of Gold and Silver. But ſuch as deſire to ſee the proportions that have been formerly between Gold and Silver (as to Value) both in this and other Nations, may read the Account in *Lex Mercat.* page 213, *&c.* Mr. *Vaughen*'s Coin and Coinage, *p.* 19, and eſpecially Mr. *Lownds*'s accurate Report thereof to the Lords of the Treaſury, *p.* 35 to 59 of his Eſſay for the amendment of the Silver Coin; but I think none of theſe contain any thing that can interfere with thoſe above, being more various, and of a different nature from all others made publick.

III. I am next to conſider the Par of Exchange, and to know what is meant by it will be eaſie, if you know what it is to exchange, for when he to whom a Bill is payable receives of the Acceptor juſt ſo much Money in Value (Weight and Fineneſs conſider'd) as was paid to the Drawer of the Bill, then the Exchange is according to Par, *viz.* Par *pro pari*, or Value for Value. But before it can be known whether an Engliſh Merchant in his exchange to any foreign Place or Country gains or loſeth by that Exchange, by paying leſs or more than the Par of the Money of the place he Exchangeth to (which he often does conſiderably, as will appear by the following Sects of this Chapter) he muſt neceſſarily know the Value of the foreign Coins in Engliſh Money, for which reaſon I have inſerted the Tables following, which contain the Values (according to the beſt Account I can procure) at leaſt of all thoſe Denominations of foreign Coin, in which exchanges are made with *England*.

2. The Denominations *England* exchanging in with other Countries, are in Pounds with *Rotterdam*, *Amſterdam*. *Antwerp* and *Hamburg*; in Pence with *Paris*, *Cales*, *Madrid*, *Genoa*, *Legborn*, *Venice*, and all other parts of *France*, *Spain* add *Italy*; in Shillings and Pence with *Lisbon*, *Oporto*, and the reſt of *Portugal*; and by the Hundred Pounds with *Ireland*. And in what Denominations they exchange with us, you will ſee in the Next Section.

3. The Value of foreign Coins, real and imaginary, in Sterling, according to the reputed Par, is as followeth.

		s.	d.	q.
French Coin.	1 Denier is Sterling	00	00	00 1/10
	12 Deniers, or 1 Soulze is	00	00	03 1/5
	20 Soulze, or 1 Lievre is	01	06	
	3 Lievres, or 1 Crown French is	04	06	
Holland and *Flanders* Coin.	1 Stiver is Sterling	00	01	1/5
	6 Stivers, or one Shilling Flemish is	00	07	1/5
	20 Shillings Flemish is Sterling	12	00	
	33 Shillings 4 *d.* Flemish is Sterling	20	00	
	1 Gilder is 20 Stivers or	02	00	
	1 *Zeland* or common Dollar	03	00	
	1 Ducatoon	06	03	1/5
	1 Specie Dollar	05	00	
Spanish Coin.	13 22/100 Malvadies of *Spain* is Sterling	00	00	1/4
	372 Malvadies, or 1 Ryall is	00	06	1/4 *qrs.*
	8 Ryalls, or a Piece of Eight *Sevil* is	04	06	1 268/1000
	1 Piece of *Mexico* is	04	06	1 2/9
	Ditto *Peru* is	04	03	1 488/1000
	Ditto *Piller* is	04	06	3 168/1000
Portugal Coin.	12.42 Rees of *Portugal* is Sterling	00	01	
	1 Mill Ree, or 1000 Rees is Sterling	06	08	1/2
	1 Festoonis	01	03	
Italy and *Venice* Coin.	1 Liever at *Leghorn* is Sterling	00	09	
	1 Crown currant at *Florance*	05	03	
	1 Ducat *de Banco* at *Venice*	04	04	
	1 St. *Mark*	02	10	
	1 *Palermo* Florin is 6 Tari, or	02	06	
German Coin.	1 Rix Dollar of the Empire	04	05	1/4
	32 *s.* at *Hamburgh*	20	00	
	1 Guilder of *Noremburg* is	07	01	

		℥ *dw.*		*s. d. qrs.*
The Fineness of a Piece of Eight.	*Piller*	being 11 : 04	And the weight of it 17 *dw.* 12 *gr.* the Value is	4 : 6 : 3 168/1000
	Sevil	being 11 : 03		4 : 6 : 1 268/1000
	Mexico	being 11 : 02		4 : 6 : 1 2/9
	Peru	being 10 : 10		4 : 3 : 1 488/1000

I have been more exact in the Calculation of the Value of these Pieces of Eight, by reason they are so universally used in most foreign Traffick.

4. And

4. And as there is a Par of Money, so is there an Equation of Weights and Measures with the *English*, which is very usefull in knowing how to value foreign Goods, by reducing the Quantity to English Weight or Measure, and the contrary to value English Commodities, by reducing them to foreign Weights and Measures, for which purpose I have inserted these Tables.

1 *English* Ell is		*Ells.*		lb.
In the *Netherlands*,	As at *Antwerp*	1.667	=	1.041
	Amsterdam	1.695	=	1.111
	Bridges	1.64	=	1.02
In *France*,	As at *Paris*	0.95	=	1.123
		Aulns.		
	Lyons	1.016	And their Pound Weight is at *London* Averdupoize,	0.934
	Callais	1.57		0.934
	Roven	1.0		1.109
		Braces.		
In *Italy*,	As at *Venice*	1.96		0.666
	Leghorn	2.00		0.75
	Millan	2.3		0.7

The Use of this Table, is,

Admit I would reduce 11465 Aulns of *Lyons* into Ells English. By the Table I find that 1.016 Auln is 1 English Ell, therefore say,

Auln Ell Aulns Ells

1.016 : 1 :: 11465 : 11284.44 Answer.

5. Tables of *Turky* Weights, of which the Porportion between a *Turky* and *English* Dram I received from a Book-keeper to a *Turky* Merchant, and he from Mr. *Normansell*, which I have reduced to English Weight as followeth.

A Table of Alleppo *Weight.*

	Drams Alleppo	*Drams English*	*l. ou. dr. English*
1 Rottello =	720	= 1260 =	4 : 14 : 12
1 Rottello =	700	= 1227 =	4 : 12 : 11
1 Rottello =	680	= 1194 =	4 : 10 : 10
1 Kintall =	68000	= 119231 =	465 : 11 : 15

Table

A Table of Smirna *Weight.*

	Smirna Drams		*English Drams*		*English l.*	*oz.*	*dr.*
	0.57	=	1	or	00	00	01
	1.00	=	1.753	=	00	00	01¼
	146.0	=	256.0	=	01	00	00
1 Rottello	180	=	315	=	01	03	11
1 Oke of	400	=	701	=	2	11	13
1 Oke of	250	=	438	=	1	11	16
1 Oke of	120	=	210	=	0	13	02
1 Kintall	18000	=	31545	=	123	03	09
1 Kintall of	17600	=	30844	=	120	07	12
1 Batman	2400	=	4207	=	16	06	15
1 Chique	800	=	1402	=	5	07	10

6. *The Conſtruction and Uſe of the Table of* Alleppo *Weight.*

The true *Alleppo* Rotello is 720 Drams, and is equal to 4 *Smirna* Rotello's, and by this Rotello all Goods of *Alleppo* are weighed.

By the ℞ of 700 Drams white Silk is only weighed.

By the ℞ of 680 Drams, *Perſia* Silk, as Legee and Ardaſs are paid for, but they are weighed by the ℞ of 700 Drams.

The Reduction of theſe Weights will be eaſie to all that underſtand but *Multiplication* and *Diviſion*, for any number of *Smirna* ℞ (or Rotello's) are reduced to *Alleppo* ℞ by dividing by 4; and the *Alleppo* in *Smirna* by multiplying by 4. Or the ℞ of 720 Drams are reduced to thoſe of 680 by multiplying the given ℞ by 720, dividing by 680, and the contrary for reducing ℞ of 680, to thoſe of 720 Drams.

7. *The Conſtruction and uſe of the Table of* Smirna *Weight.*

By the Oke of 400 Drams are weighed Cloves, Mace, Pepper, Benjamin, Gum-Arabick, Sea-Horſe Teeth, Galbanum, Ginger, Indigo, Gumtragant Vachetoes, White Cordefant Scammony, Wormſeed, Coucheneal, Salſa Parella, Nutmegs, Cinnamon, Rubarb, Senna and Caſſia.

By the Oke of 250 Drams is weighed Opium. And by that of 120 Drams, Saffron.

There are 2 ſorts of Kintalls: The firſt containing 45 Okes of 400 Drams each, or 18000 *Smirna* Drams. By which Kintall is weighed

weighed Gauls, Allum, Cotton-Yarn, Lead, Brazile-wood, Valonia, Logwood, Steel, Sugar, Bees-Wax and Gum-Almonds.

The ſecond Kintall contains 44 Okes of 400 Drams each, or 17600 *Smirna* Drams, by which they weigh Cotton-Wool, Sheeps-Wool, Tin, Box-wood and Anniſ-ſeeds.

The Batman contains 6 Okes of 400 Drams each, or 2400 Drams, by which they weigh Legee, Ardaſs and Sherbafee-Silk.

The Chique contains 2 Okes of 400 Drams each, by which they weigh Goats-Hair.

The Uſe of the Table of Smirna *Weight.*

If you would reduce any kind of Merchandize, which you have weighed to you in this Weight, either into ſome other Denomination of *Turky*, or into *Engliſh* Weight: This is the

General Rule.] Multiply the Number given by the Tabular Number anſwering a Unit of the ſame Denomination, and divide the Product by the Tabular Number anſwering to a Unit of the Denomination into which you would reduce the given Number, and the Quotient is the Anſwer: Always obſerving to multiply and divide by the *Smirna* Weight, when you would reduce into *Smirna* Weight. And to multiply the Number given by the *Engliſh* Drams in a Unit of that Denomination, and afterward reduce thoſe Drams into Pounds.

Example.] In 470 Okes of Saffron, each 120 Drams, how many Rottello's?

Rule.] Multiply 470 by 120, and the Product divide by 180, and the Quotient is Rotello's 313⅓.

Or if you would reduce the 470 Okes into Pounds *Engliſh*; multiply the ſame by 21, *Engliſh* Drams in that Oke, and the Quotient is *Engliſh* Drams for Anſwer, which reduce into *Engliſh* Pounds; thus,

470 Okes given.
210 Drams in the Oke.

47
94

16) 98700 Drams *Engl.* (6168 (385 : 08 : 12 Anſwer.
12 Drams rem. 8 *oz.* rem.

8. How

8. In calculating Money according to Par. You muſt know there is more difficulty in this matter than moſt People imagine, yet I do not find that any one has diſcuſt it ſo plain to a mean Capacity as might be wish'd, but ſince it is a thing ought to be certainly known and underſtood, becauſe of great uſe among Merchants, I have for their ſakes (for whoſe ſervice this whole Treatiſe is calculated) made the thing as plain as I can, as follows.

9. The firſt thing then to be conſider'd, is, That all foreign Coin is Bullion to us, and ours Bullion to them, ſo that the extrinſick Value is not regarded in Exchange.

10. The ſecond thing conſiderable, is the Fineneſs of our own Coin, and the Weight and Fineneſs of the Foreign, which we are to receive in Exchange; and this Knowledge of the foreign muſt be acquired either to be ſo by the Experience of ſome authentick Author, or by the Merchants actual Eſſaying and Weighing of ſome of the ſame Pieces.

Thus for Example. Admit it were required to know how much Sterling Bullion or Coin may be given for 1000 Pieces of Eight *Sevil.*

	℥ *dw.*
The Fineneſs of our own Bullion or Coin I know is	11 : 2
And the Fineneſs of a Piece of 8, I find to be	11 : 3
And its Weight *17 dw. 12 grs.*	
Or the Weight of 1000 Pieces I find	875 : 0

11. The third thing is to know how many Ounces of Silver 11 Ounces 2 *dw.* fine, is equal to 875 Ounces of 11 Ounces 3 *dw.* fine, which is found by ſingle Indirect Proportion, thus;

℥ *dw.*	℥	℥ *dw.*	℥
11 : 3 .	875 .	11 : 2 .	878.94144 Anſwer.

Here I find that I may give 878.94144 Ounces of Bullion, 11 Ounces 2 *dw.* fine, for 875 Ounces of Bullion of 11 Ounces 3 *dw.* fine, (or for 1000 Pieces of Eight *Sevil,*) which if I pay in Coin, I muſt for the 1000 Pieces of Eight, pay 227 *l.* 1 *s.* 2¼ *d.* Sterling, for,

Grains	*l. Sterl.*	*Grains*	*l. Sterl.*
1858.0645 .	1 : :	421891.89	227.059

That is to ſay; as 1858.0645 (the Grains in 1 Pound Sterling) is in Proportion to 1 Pound Sterling.

So is 421891.8912 (the Grains in 878.94144 Ounces of Bullion 11 Ounces 2 *dw.* fine, which are equal in Value to the 1000 Pieces of Eight.)

To

Gold Coin Calculated according to the Standard of the Mint 12 Ounces of Bullion being Coined into 44½ Guineas; at which rate the Guinea will weigh 5 *dw.* 9.4382, *&c.* Grains; and the other Pieces are for Weight and Value, according to the subsequent Table.

Pieces.	*The Current Value of Coined Pieces.*	*Value at Standard Rate.*	*Value as Bullion at 4 l. per Ounce.*	*Weight of Coined Piece.*	*Fineness*
	l. s. d.	l. s. d.	l. s. d qr.	℥ dw. gr.	
	1:02:00	1:00:00	1:01:06:3½	0 05: 09½	
The Guinea	5:10:00	5:00:00	5:07:10:1½	1:06:23	22 Carats
The 5 Guin. Piece					
The half Guin. (& qr. in propor.	0:11:00	0:10:00	0:10:09:1½	0:02:16,½	or 113
Car. or *Jac.* broad 20 *s.* Pieces.	1:04:00	1:00:00	1:03:00---	0:05:18	
Jacobus broad 22 *s.* Pieces	1:06:00	1:02:00	1:05:00---	0:06:06	

There are oth er Denominations of Engliſh Gold, as the Angel Gold, or Roſe Nobles, 23 Carats, 3½ Grains fine; and the Pieces of different Weight, from 8 *dw.* 6 *gr.* to 9 *dw.* 18, as alſo the Sovereign Gold, or 20 *s.* Pieces of *H.* 8. but 20 Carats fine, which I think it not proper to ſay more of, there being few or none to be ſeen Currant now.

12. There are alſo made Currant the French and Spaniſh Piſtols, about as fine as Crown Gold, and the weight being 4 *dw.* 8 *gr.* the value thereof, at 4 *l.* the Ounce, is 17 *s.* 4 *d.* each, tho' they have through cuſtom long paſſed currant among us for 17 *s.* 6 *d.* and at preſent for 18 *s.* each.

13. There might ſeveral uſefull Obſervations be drawn from the two foregoing Tables: as that Gold and Silver are dearer in the Coin than in the Bullion at the preſent price thereof; and conſequently, that if there were no Laws againſt it, it's againſt any ones Intereſt to tranſport or melt the Coin down. 2. That the late Regulation of our Coin has brought Bullion to theſe Rates, it being much dearer before. 3. That Gold and Silver Bullion is as cheap now, as it has been this many years paſt, and conſequently, that there is no more reaſon for altering the Standard of our Coin now, than there was 40 years ago. 4. That at the Rate or Proportion of Guineas

Paſſing current at 22 *s.* each;

	l.	*d.*
Piſtoles ought to go for	17 :	8
20 *s.* broad Gold, at	23 :	6¼
22 *s.* broad Gold, at	25 :	7

which is leſs than the current Value of theſe Pieces, as in the firſt Column toward the Left-hand of the preceding Table doth appear. But theſe, with many other Remarks that may eaſily be made, I leave to the Ingenious, the deſign of this work not admitting me to make any farther Excurſion.

14. They that conſider the proportion between Gold and Silver (which may likewiſe be gathered from the foregoing Tables) ought neceſſarily to mention whether the Analogy of Weight (Bulk for Bulk) or of Value, and at what Price they rate each; and whether that price be of fine Gold or fine Silver, or alloy'd; and whether they mean the Price as Bullion at preſent, or at the Standard Rate, otherwiſe their Calculation muſt be uncertain, and they leave the Reader in the dark; therefore to make this matter plain, I have inſerted the Proportions following, being all the Caſes I could think uſeful.

1. The Weight of fine Silver to that of fine Gold (Bulks alike) is,

As 1 to 1.83896, *&c.*

2. Fine Silver to fine Gold, calculated from the Standard Rate, the Pound of fine Gold being worth 48 *l.* 10 *s.* 10 *d.* and fine Silver 3 *l.* 6 *s.* 11¼ *d.* is,

As 1 to 14.49, *&c.*

3. Standard Sterling Silver to Standard Crown Gold at Standard Value of 44 *l.* 10 *s.* the Pound of Gold, and 3 *l.* 2 *s.* the Pound of Silver is,

As 1 to 14.354, *&c.*

4. Sterling Silver at 5 *s.* the Ounce of Crown Gold at 4 *l.* the Ounce, is,

As 1 to 16.

5. Sterling Silver to Crown Gold, according to the now currant Value of Silver and Gold 129.4 Grains of Gold paſſing currant for 22 *s.* and 19 *dw.* 8½ Grains of Silver running at 5 *s.* is,

As 1 to 15.79032, *&c.*

6. Fine Gold to Crown Gold, is in Value,

As 1 to .9107, *&c.*

7. Fine

7. Fine Silver to Sterling Silver, is in Value,
As 1 to 0960, *&c.*

And from these several proportions may be deduced many useful things relating the Weight, Fineness and Valuation of Gold and Silver. But such as desire to see the proportions that have been formerly between Gold and Silver (as to Value) both in this and other Nations, may read the Account in *Lex Mercat.* page 213, *&c.* Mr. *Vaughen*'s Coin and Coinage, *p.* 119; and especially Mr. *Lownde*'s accurate Report thereof to the Lords of the Treasury, *p.* 35 to 59 of his Essay for the amendment of the Silver Coin; but I think none of these contain any thing that can interfere with those above, being more various, and of a different nature from all others made publick.

III. I am next to consider the Par of Exchange, and to know what is meant by it will be easie, if you know what it is to exchange, for when he to whom a Bill is payable receives of the Accepter just so much Money in Value (Weight and Fineness consider'd) as was paid to the Drawer of the Bill, then the Exchange is according to Par, *viz.* Par *pro pari*, or Value for Value. But before it can be known whether an English Merchant in his exchange to any foreign Place or Country gains or loseth by that Exchange, by paying less or more than the Par of the Money of the place he Exchangeth to (which he often does considerably, as will appear by the following Sects of this Chapter) he must necessarily know the Value of the foreign Coins in English Money, for which reason I have inserted the Tables following, which contain the Values (according to the best Account I can procure) at least of all those Denominations of foreign Coin, in which exchanges are made with *England*.

2. The Denominations *England* exchanging in with other Countries, are in Pounds with *Rotterdam*, *Amsterdam*, *Antwerp* and *Hamburg*; in Pence with *Paris*, *Cales*, *Madrid*, *Genoa*, *Leghorn*, *Venice*, and all other parts of *France*, *Spain* add *Italy*; in Shillings and Pence with *Lisbon*, *Oporto*, and the rest of *Portugal*; and by the Hundred Pounds with *Ireland*. And in what Denominations they exchange with us, you will see in the Next Section.

3. The Value of foreign Coins, real and imaginary, in Sterling, according to the reputed Par, is as followeth.

		s.	d.	q.
French Coin.	1 Denier is Sterling	00	00	$00\frac{3}{10}$
	12 Deniers, or 1 Soulze is	00	00	$03\frac{3}{5}$
	20 Soulze, or 1 Livre is	01	06	
	3 Livres, or 1 Crown French is	04	06	
Holland and *Flanders* Coin.	1 Stiver is Sterling	00	$01\frac{1}{5}$	
	6 Stivers, or one Shilling Flemish is	00	$07\frac{1}{5}$	
	20 Shillings Flemish is Sterling	12	00	
	33 Shillings 4 *d.* Flemish is Sterling	20	00	
	1 Gilder is 20 Stivers or	02	00	
	1 *Zeland* or common Dollar	03	00	
	1 Ducatoon	06	$03\frac{1}{5}$	
	1 Specie Dollar	05	00	
Spanish Coin.	$13\ \frac{77}{100}$ Malvadies of *Spain* is Sterling	00	$00\frac{1}{4}$	
	372 Malvadies, or 1 Ryall is	00	$06\frac{1}{4}$	*qrs.*
	8 Ryalls, or a Piece of Eight *Sevil* is	04	06	$1\frac{968}{1000}$
	1 Piece of *Mexico* is	04	06	$1\frac{7}{29}$
	Ditto *Peru* is	04	03	$1\frac{488}{1000}$
	Ditto *Piller* is	04	06	$3\frac{168}{1000}$
Portugal Coin.	12.42 Rees of *Portugal* is Sterling	00	01	
	1 Mill Ree, or 1000 Rees is Sterling	06	$08\frac{1}{2}$	
	1 Festoonis	01	03	
Italy and *Venice* Coin.	1 Liever at *Leghorn* is Sterling	00	09	
	1 Crown current at *Florance*	05	03	
	1 Ducat *de Banco* at *Venice*	04	04	
	1 St. *Mark*	02	10	
	1 *Palermo* Florin is 6 Tari, or	02	06	
German Coin.	1 Rix Dollar of the Empire	04	$05\frac{1}{4}$	
	32 *s.* at *Hamburgh*	20	00	
	1 Guilder of *Noremburg* is	07	01	

		being	*dw.*	And the weight of it 17 *dw.* 12 *gr.* the Value is	*s.*	*d.*	*qrs.*
The Fineness of a Piece of Eight.	*Piller*		11 : 04		4	6	$3\frac{168}{1000}$
	Sevil		11 : 03		4	6	$1\frac{968}{1000}$
	Mexico		11 : 02		4	6	$1\frac{7}{29}$
	Peru		10 : 10		4	3	$1\frac{488}{1000}$

I have been more exact in the Calculation of the Value of these Pieces of Eight, by reason they are so universally used in most foreign Traffick.

4. And

4. And as there is a Par of Money, so is there an Equation of Weights and Measures with the *English*, which is very usefull in knowing how to value foreign Goods, by reducing the Quantity to English Weight or Measure, and the contrary to value English Commodities, by reducing them to foreign Weights and Measures, for which purpose I have inserted these Tables.

1 *English* Ell is		*Ells.*		lb.
In the *Netherlands*,	As at *Antwerp*	1.667		1.041
	Amsterdam	1.695		1.111
	Bridges	1.64		1.02
In *France*,	As at *Paris*	0.95		1.123
		Aulns.		
	Lyons	1.016	And their Pound Weight is at *London* Averdupoize,	0.934
	Callais	1.57		0.934
	Rouen	1.0		1.109
		Braces.		
In *Italy*,	As at *Venice*	1.96		0.666
	Leghorn	2.00		0.75
	Millan	2.3		0.7

The Use of this Table, is,

Admit I would reduce 11465 Aulns of *Lyons* into Ells English. By the Table I find that 1.016 Auln is 1 English Ell, therefore say,

Auln	*Ell*	*Aulns*	*Ells*
1.016 :	1 ::	11465 :	11284.44 Answer.

5. Tables of *Turky* Weights, of which the Porportion between a *Turky* and *English* Dram I received from a Book-keeper to a *Turky* Merchant, and he from Mr. *Normansell*, which I have reduced to English Weight as followeth.

A Table of Alleppo *Weight.*

	Drams Alleppo		*Drams English.*		*l. ou. dr. English*
1 Rottello	720	=	1260	=	4 : 14 : 12
1 Rottello	700	=	1227	=	4 : 12 : 11
1 Rottello	680	=	1194	=	4 : 10 : 10
1 Kintall	68000	=	119231	=	465 : 11 : 15

Table

A Table of Smirna *Weight.*

	Smirna Drams		*English Drams*		*English l.*	*on.*	*dr.*
	0,87 =		1	or	00	00	01
	1.00 =		1.753 =		00	00	01¾
	146.0 =		256.0 =		01	00	00
1 Rottello =	180 =		315 =		01	03	11
1 Oke of =	400 =		701 =		2	11	13
1 Oke of =	250 =		438 =		1	11	16
1 Oke of =	120 =		210 =		0	13	02
1 Kintall =	18000 =		31545 =		123	03	09
1 Kintall of =	17600 =		30844 =		120	07	12
1 Batman =	2400 =		4207 =		16	06	15
1 Chique =	800 =		1402 =		5	07	10

6. *The Construction and Use of the Table of* Alleppo *Weight.*

The true *Alleppo* Rotello is 720 Drams, and is equal to 4 *Smirna* Rotello's, and by this Rotello all Goods of *Alleppo* are weighed.

By the ℔ of 700 Drams white Silk is only weighed.

By the ℔ of 680 Drams, *Persia* Silk, as Legee and Ardass are paid for, but they are weighed by the ℔ of 700 Drams.

The Reduction of these Weights will be easie to all that understand but *Multiplication* ond *Division*, for any number of *Smirna* ℔ (or Rotello's) are reduced to *Alleppo* ℔ by dividing by 4; and the *Alleppo* in *Smirna* by multiplying by 4. Or the ℔ of 720 Drams are reduced to those of 680 by multiplying the given ℔ by 720, dividing by 680, and the contrary for reducing ℔ of 680, to those of 720 Drams.

7. *The Construction and use of the Table of* Smirna *Weight.*

By the Oke of 400 Drams are weighed Cloves, Mace, Pepper, Benjamin, Gum-Arabick, Sea-Horse Teeth, Galbanum, Ginger, Indigo, Gumtragant Vachetoes, White Cordefant Scammony, Wormseed, Coucheneal, Salsa Parella, Nutmegs, Cinnamon, Rubarb, Senna and Cassia.

By the Oke of 250 Drams is weighed Opium. And by that of 120 Drams, Saffron.

There are 2 sorts of Kintalls: The first containing 45 Okes of 400 Drams each, or 18000 *Smirna* Drams. By which Kintall is weighed

weighed Gauls, Allum, Cotton-Yarn, Lead, Brazile-wood, Valonia, Logwood, Steel, Sugar, Bees-Wax and Gum-Almonds.

The ſecond Kintall contains 44 Okes of 400 Drams each, or 17600 *Smirna* Drams, by which they weigh Cotton-Wool, Sheeps-Wool, Tin, Box-wood and Anniſ-ſeeds.

The Batman contains 6 Okes of 400 Drams each, or 2400 Drams, by which they weigh Legee, Ardaſs and Sherbafee-Silk.

The Chique contains 2 Okes of 400 Drams each, by which they weigh Goats Hair.

The Uſe of the Table of Smirna *Weight.*

If you would reduce any kind of Merchandize, which you have weighed to you in this Weight, either into ſome other Denomination of *Turky*, or into *Engliſh* Weight: This is the *General Rule.*] Multiply the Number given by the Tabular Number anſwering a Unit of the ſame Denomination, and divide the Product by the Tabular Number anſwering to a Unit of the Denomination into which you would reduce the given Number, and the Quotient is the Anſwer: Always obſerving to multiply and divide by the *Smirna* Weight, when you would reduce into *Smirna* Weight. And to multiply the Number given by the *Engliſh* Drams in a Unit of that Denomination, and afterward reduce thoſe Drams into Pounds.

Example.] In 470 Okes of Saffron, each 120 Drams, how many Rottello's?

Rule.] Multiply 470 by 120, and the Product divide by 180, and the Quotient is Rotello's $313\frac{1}{3}$.

Or if you would reduce the 470 Okes into Pounds *Engliſh*; multiply the ſame by 21, *Engliſh* Drams in that Oke, and the Quotient is *Engliſh* Drams for Anſwer, which reduce into *Engliſh* Pounds; thus,

470 Okes given.
210 Drams in the Oke.

47
94

16) 98700 Drams *Engl.* (6168 (385 : 08 : 12 Anſwer.
12 Drams rem. 8 *ou.* rem.

8. How

8. In calculating Money according to Par. You muſt know there is more difficulty in this matter than moſt People imagine, yet I do not find that any one has diſcuſt it ſo plain to a mean Capacity as might be wiſh'd, but ſince it is a thing ought to be certainly known and underſtood, becauſe of great uſe among Merchants, I have for their ſakes (for whoſe ſervice this whole Treatiſe is calculated) made the thing as plain as I can, as follows.

9. The firſt thing then to be conſider'd, is, That all foreign Coin is Bullion to us, and ours Bullion to them, ſo that the extrinſick Value is not regarded in Exchange.

10. The ſecond thing conſiderable, is the Fineneſs of our own Coin, and the Weight and Fineneſs of the Foreign, which we are to receive in Exchange; and this Knowledge of the foreign muſt be acquired either to be ſo by the Experience of ſome authentick Author, or by the Merchants actual Eſſaying and Weighing of ſome of the ſame Pieces.

Thus for Example. Admit it were required to know how much Sterling Bullion or Coin may be given for 1000 Pieces of Eight *Sevil.*

℥ *dw.*

The Fineneſs of our own Bullion or Coin I know is——11 : 2

And the Fineneſs of a Piece of 8, I find to be——11 : 3

And its Weight 17 *dw.* 12 *grs.*

Or the Weight of 1000 Pieces I find——875 : 0

11. The third thing is to know how many Ounces of Silver 11 Ounces 2 *dw.* fine, is equal to 875 Ounces of 11 Ounces 3 *dw.* fine, which is found by ſingle Indirect Proportion, thus;

℥ *dw.*	℥	℥ *dw.*	℥
11 : 3 .	875 .	11 : 2 .	878.94144 Anſwer.

Here I find that I may give 878.94144 Ounces of Bullion, 11 Ounces 2 *dw.* fine, for 875 Ounces of Bullion of 11 Ounces 3 *dw.* fine, (or for 1000 Pieces of Eight *Sevil,*) which if I pay in Coin, I muſt for the 1000 Pieces of Eight, pay 227 *l.* 1 *s.* 2¼ *d.* Sterling, for,

Grains	*l. Sterl.*	*Grains*	*l. Sterl.*
1858.0645 .	1 : :	421891.89	227.059

That is to ſay; as 1858.0645 (the Grains in 1 Pound Sterling) is in Proportion to 1 Pound Sterling.

So is 421891.8912 (the Grains in 878.94144 Ounces of Bullion 11 Ounces 2 *dw.* fine, which are equal in Value to the 1000 Pieces of Eight.)

To

To 227.059 *l.* Sterling, or 227 : 1 *s.* 02¼.

But ſo often as I can buy 878.941 Ounces of Bullion for leſs than 227 *l.* 1 *s.* 2¼ *d.* (which I can always do ſo often as Sterling Silver is under 5 *s.* 2 *d. per* Ounce) ſo often I gain, by making my Exchange in Bullion: as ſuppoſe I can buy Bullion for 5 *s.* 1 *d. per* Ounce, at that Rate the 878.941 Ounces (which I am to give for the 1000 Pieces of Eight) will ſtand me in 223 *l.* 7 *s.* 11½ *d.* which is leſs than 227 *l.* 1 *s.* 2¼ *d.* (the Summ I pay exchanging in Coin) by 3 *l.* 13 *s.* 2¾ *d.* which is my gain by exchanging in Bullion. And thus in Exchanges the Par of Money and Bullion ought to be conſidered, as well as the Par of the Domeſtick and Foreign Coins.

13. But though the foregoing Rules contain a true method of calculating Money according to Par, yet ſince the Price of Exchange is generally agreed on, that ſo many Pounds or Pence Sterling ſhall be paid for a piece of Eight, or other Denomination of foreign Coin, it is more uſefull and ſatisfactory to know how much Sterling Money each of thoſe foreign Pieces are worth, than to know only their Weight and Fineneſs, and how much Bullion of ſuch a Fineneſs is worth ſo much leſs or more fine, and for this reaſon I have in the foregoing Table, under Article the 3d. of the 3d. general Head, of the Par of Exchange, ſhewed the true Value of each Piece of foreign Coin, ſo that by Inſpection the Merchant may know (when a Bill is drawn on him, or by ſeeing the Price currant of Exchange) whether that Price (called the Courſe of Exchange, which I ſhall ſpeak to next) be above or below the Par, and conſequently whether himſelf or the Nation gain or loſe thereby.

IV. The Courſe of Exchange is the currant or running Price of Exchange to all places where there is any, which is ſometimes above, ſometimes below the Par, according as the ſame is influenced by the Accidents and Circumſtances of Trade and Nations, and this differs only from the Par in this: That the Par of Exchange ſhews what other Nations ſhould allow in Exchange, which is certain and fixed. But the Courſe ſhews what they will allow in Exchange; which is uncertain and contingent.

2. And though there are Tables of the Courſe of Exchange publiſhed once or twice every Week, yet I find the Generality of Perſons ignorant of the meaning thereof, which induced me to explain the ſame as followeth.

	The Course of Exchange Octob. 20.-96.			*Par of Exchange.*
Amsterdam	31 *s.* 06 *d.*	Flemish	for 1 *l.* Sterling	33 *s.* 4 *d.* Flem.
Rotterdam	31 *s.* 08 *d.*	Flem.	for 1 *l.* Sterling	33 *s.* 4 *d.* Flem.
Antwerp	31 *s.* 05 *d.*	Flem.	for 1 *l.* Sterling	33 *s.* 4 *d.* Flem.
Hamburgh	30 *s.* 04 *d.*		for 1 *l.* Sterling	32 *s.* 0
Madrid	56½ *d.*	Sterling	for 1 piece of 8. *Mex.*	54¼ *d.* Sterling.
Cales	56½ *d.*	Sterl.	for 1 piece of 8. *Mex.*	54¼ *d.* Sterling.
Genoa	62½ *d.*	Sterl.	for 1 piece of 8. *Mex.*	54¼ *d.* Sterling.
Leghorn	62½ *d.*	Sterl.	for 1 piece of 8. *Mex.*	54¼ *d.* Sterling.
Venice	59½ *d.*	Sterl.	for 1 Ducat	52 *d.* Sterling.
Paris	51 *d.*	Sterl.	for 1 Crown *French*	54 *d.* Sterling.
Lisbon	6*s.* 6*d.*	Sterl.	for 1 Millree	6*s.* 08½*d.* Sterl.
O-Porto	6*s.* 5*d.*	Sterl.	for 1 Millree	6*s.* 08½*d.* Sterl.

Note, That Bills are usually drawn to and from *Dublin* in *Ireland*, payable at 21 days. And the Exchange sometimes 8, 9, 10, *&c.* Pounds *per Cent.* allowed for Return.

The Table is so plain, it needs no Construction, for it shews that on the 20th of *October*, 1696. the Course of Exchange to *Amsterdam* was 31 *s.* 6 *d.* Flemish, for 1 Pound Sterling, which is 1 *s.* 10 *d.* Flemish *per* Pound loss to us, it being so much under the Par, or 33 *s.* 4 *d.* and so of the rest.

3. A TABLE Shewing how much Sterling Molars, Ducats, Pieces of Eight, Flemish-pounds,

Pieces of Foreign Coin,	At 48 *d.* per Ps.	At 49 *d.* per Ps.	At 50 *d.* per Ps.	At 51 *d.* per Ps.	At 52 *d.* per Ps.	At 53 *d.* per Ps.	At 54 *d.* per Ps.	At 55 *d.* per Ps.	At 56 *d.* per Ps.
1	000.2	000.204	000.208	000.212	000.217	000.221	000.225	000.229	000.233
2	000.4	000.408	000.417	000.425	000.433	000.442	000.45	000.458	000.467
3	000.6	000.612	000.612	000.637	000.65	000.667	000.67	000.687	000.7
4	000.8	000.816	000.833	000.85	000.867	000.883	000.9	000.917	000.933
5	001.0	001.021	001.042	001.062	001.083	001.104	001.125	001.146	001.167
6	001.2	001.225	001.25	001.27	001.3	001.325	001.35	001.375	001.4
7	001.4	001.429	001.458	001.487	001.517	001.546	001.575	001.604	001.633
8	001.6	001.633	001.671	001.7	001.733	001.767	001.8	001.833	001.867
9	001.8	001.837	001.875	001.912	001.95	001.937	002.025	002.062	002.1
10	002.0	002.042	002.083	002.125	002.167	002.208	002.25	002.292	002.333
20	004.0	004.083	004.167	004.25	004.333	004.417	004.5	004.583	004.667
30	006.0	006.125	006.25	006.375	006.5	006.612	006.75	006.875	007.0
40	008.0	008.167	008.333	008.5	008.667	008.833	009.0	009.167	009.333
50	010.0	010.208	010.417	010.625	010.833	011.042	011.25	011.458	011.666
60	012.0	012.25	012.5	012.75	013.0	013.25	013.5	013.75	014.0
70	014.0	014.292	014.583	014.875	015.167	015.458	015.75	016.042	016.333
80	016.0	016.333	016.667	017.000	017.333	017.666	018.0	018.333	018.667
90	018.0	017.375	018.75	019.125	019.5	019.875	020.25	020.625	021.0
100	020.0	020.417	020.833	021.25	021.667	022.083	022.5	022.917	023.333
200	040.0	040.834	041.667	042.5	043.333	044.167	045.0	045.833	046.667
300	060.0	001.25	062.5	063.75	065.0	066.25	067.5	068.75	070.0
400	080.0	081.667	083.333	085.000	086.666	088.333	090.0	091.667	093.333
500	100.0	102.083	104.167	106.25	108.333	110.417	112.5	114.583	116.667
600	120.0	122.5	125.000	127.5	130.0	132.5	135.0	137.5	140.0
700	140.0	142.917	145.833	148.75	151.666	154.583	157.5	160.416	163.333
800	160.0	163.333	166.667	170.0	173.333	176.667	180.0	183.333	186.667
900	180.0	183.75	187.5	191.25	195.0	198.75	202.5	206.25	210.0
1000	200.0	204.167	208.333	212.5	216.666	220.833	225.0	229.167	233.333
2000	400.0	408.334	416.667	425.0	433.333	441.667	450.0	458.333	466.667

ney is contain'd in any Number of Crowns, Dol- &c. from 1 to 2000.

Pieces of Foreign Coin,	At 57 *d.* *per* Ps.	At 58 *d.* *per* Ps.	At 59 *d.* *per* Ps.	At 60 *d.* *per* Ps.	At 33 *s.* *per* Ps.	At ¼ *d.* *per* Ps.	At ⅜ *d.* *per* Ps.	At ½ *d.* *per* Ps.	At ⅝ *d.* *per* Ps.
1	000.23	000.242	000.246	000.25	000.606	00.001	00.002	00.003	00.004
2	000.47	000.483	000.492	000.5	001.212	00.002	00.003	00.005	00.007
3	000.712	000.725	000.737	000.75	001.818	00.003	00.005	00.008	00.011
4	000.95	000.967	000.983	001.0	002.424	00.004	00.006	00.010	00.014
5	001.187	001.208	001.229	001.25	003.03	00.005	00.008	00.013	00.018
6	001.425	001.45	001.475	001.5	003.636	00.006	00.009	00.015	00.022
7	001.662	001.692	001.721	001.75	004.242	00.007	00.011	00.018	00.025
8	001.9	001.933	001.967	002.0	004.848	00.008	00.012	00.021	00.029
9	002.137	002.175	002.212	002.25	005.454	00.009	00.014	00.024	00.033
10	002.375	002.417	002.458	002.5	006.060	00.010	00.016	00.026	00.035
20	004.75	004.833	004.917	005.0	012.121	00.021	00.031	00.052	00.073
30	007.125	007.25	007.375	007.5	018.181	00.032	00.047	00.078	00.109
40	009.5	009.667	009.833	010.0	024.242	00.042	00.06	00.104	00.146
50	011.875	012.083	012.292	012.5	030.303	00.052	00.07	00.130	00.182
60	014.25	014.5	014.75	015.0	036.364	00.062	00.094	00.156	00.219
70	016.625	016.917	017.208	017.5	042.424	00.073	00.109	00.182	00.251
80	019.0	019.333	019.667	020.0	048.485	00.083	00.125	00.208	00.292
90	021.375	021.75	022.125	022.5	054.545	00.094	00.141	00.234	00.328
100	023.75	024.167	024.583	025.0	060.606	00.104	00.156	00.26	00.365
200	0475.	048.333	049.167	050.0	121.212	00.208	00.312	00.521	00.729
300	071.25	072.5	073.75	075.0	181.818	00.312	00.469	00.781	01.094
400	095.0	096.667	098.333	100.0	242.424	00.417	00.625	01.041	01.458
500	118.75	120.833	122.917	125.0	303.03	00.521	00.781	01.301	01.823
600	142.5	145.0	147.5	150.0	363.636	00.625	00.937	01.561	02.190
700	166.25	169.167	172.083	175.0	424.242	00.729	01.093	01.822	02.552
800	190.0	193.333	196.667	200.0	484.848	00.833	01.249	02.083	02.917
900	213.75	217.5	221.25	225.0	545.455	00.937	01.406	02.344	03.281
1000	237.05	241.667	245.833	250.0	606.060	01.042	01.562	02.604	03.646
2000	475.0	483.333	491.667	500.0	1212.121	02.083	03.125	05.209	07.291

The Construction of the Table foregoing.

The first Column toward the left-hand is any number of *Crowns*, *Dollars*, *Ducats*, *Pieces of Eight*, *Flemish-pounds*, or any other Denomination of Foreign Coin, whose Value is as expressed at the Head of each Column; the 13 Columns next, shew the Sterling Money that any Summ of Foreign Coin is equal to, at any Rate from 48 *d.* to 60 *d.* Sterling, for each Piece of Foreign Coin. The 5th. Column from the right-hand, sheweth how many Pounds Sterling are contained in any Number of Flemish-pounds from 1 to 2000, at the Rate of 33 *s.* Flemish, for 20 *s.* Sterling. The four Columns next the right-hand, shew the Amount of any Piece of Coin at $\frac{1}{2}$, $\frac{3}{8}$, $\frac{1}{8}$ or $\frac{7}{8}$ of a Penny *per* Piece, whose Use shall be shewed by and by.

The Calculation of the Table.

Multiply any of the Numbers at the Head of a Column by any of those in the Column next th Left-hand, and the Product is the Tabular Number answering the said two Numbers in Sterling Money, except the Column of Flemish-Pounds, which is thus calculated:

As 33 Shillings Flemish
Is in proportion to 1 Pound Sterling,
So is 20 Shillings Flemish
To .606060 *l.* Sterling, which Number being Multiplied by any of the Numbers in the Column next the Left-hand, produces the respective Number in Sterling Money, answerable to the aforesaid Number in the Left-hand Column, supposing them Flemish-pounds.

The Use of the Table in Casting up Bills of Exchange.

Admit you would know how much Sterling Money is contained in 1000 Dollars, each 60$\frac{1}{2}$ *d.* Sterling?

Look for 1000 in the Column next the Left-hand, and in a right Line toward the Right-hand under 60 *d.* is 250.0 *l.*
then look under $\frac{1}{4}$ *d.* and you find 1.042
which doubled (for the $\frac{1}{2}$ *d.*) is ———— 2.084 *l.*
The Summ of which is the Answer,
which makes Sterling ———— 252.084 *l.*

Note that if the Summ given of Foreign Coin is 1500, 1820, 2500, &c. you may take the Answer out at twice or thrice.

V. I

V. I have hinted before that there are accidental or contingent Cauſes of the Riſe and Fall of Exchange, and theſe Cauſes are either general or more particular.

2. The Cauſes in general of the Fall of Exchange is, when any thing happeneth in a Nation or Place, that interrupts and obſtructeth the Courſe of Trade, ſo that it cannot be carried on in ſo good Order, or in ſo great Quantity in the Groſs, as it formerly uſed to be, the contrary whereof maketh the Courſe of Exchange riſe in favour of that Nation. Now theſe accidental Interruptions happening in one, two, *&c.* places of a Nation or Country unknown to the reſt thereof, gives occaſion for ſome to aſſert, that the Riſe and Fall of Exchange, is unaccountable; only in truth becauſe they cannot ſurvey and diſcern the circumſtances of the whole body of Trade ſo well as they can their own, or perhaps that of the Town in which they reſide. But more particularly.

3. When the Ballance of Trade runneth againſt a Nation, *i. e.* when a Nation has more occaſion to pay Debts in foreign parts, than they have to receive from thence; in this caſe, the Courſe of Exchange will run low againſt ſuch a Nation, which Ballance of Trade is only perceiveable by its Effects, the greateſt and moſt viſible of which, is the raiſing the Courſe of Exchange.

4. Another cauſe of the Exchange running low againſt any Nation is, when the Coin thereof is debaſed or diminiſhed either in Weight or Fineneſs (as I have ſhewed more at large on another Occaſion) this we have lately had a Specimen of, when our coined Silver was ſo prodigeouſly clipt, that near ⅓ was diminiſhed. And coined Gold at 30 *s.* that was coined but at 20 *s.* the *Dutch* (and other Nations in like manner) allowed us but 26 and 27 *s.* Flemiſh for 20 *s.* Sterling, whereas, now ſince the amending our Silver, and lowering the Value of our Gold Coins, the *Dutch* have allowed us (and other Nations proportionably) 35 *s.* for 20 *s.* Sterling.

5. The Riſe or Fall of Bullion riſes or falls the Courſe of Exchange.

6. When any Nation is obliged to maintain an Army out of their own Country, this will fall the Courſe of Exchange againſt ſuch a Nation.

7. Sometimes Embargoes, ſometimes contrary Winds, ſometimes too great Encouragement of Importing Foreign, and Diſcouragement of Exporting Inland Goods, *&c.* lower the Courſe of Exchange, tho' not immediately, but by influencing the Ballance of Trade.

But

But theſe Cauſes are ſufficient, to ſuch as were ignorant thereof before, and for ſuch as were not, they will be as apt to gueſs at the other Cauſes of the Riſe and Fall of Exchange, as I can be to inform them.

VI. As the Preſcription of fit and proper Remedies do naturally reſult from a right Apprehenſion of the Cauſe of a Diſtemper or Irregularity; ſo do the Rules I am now upon, from the Cauſes delivered in the laſt general Head, which might be a ſufficient Reaſon for me to leave every one to draw their own Conſequences; yet becauſe ſome young Tyroes might be miſled, I ſhall give them what aſſiſtance I am able in the matter.

2. The firſt Rule that may be given to keep the Courſe of Exchange as high as the Par, is to keep our ſelves from being indebted to Foreigners, which ſome would have done, by keeping a ſtrict Account of the Ballance of Trade; but that being impoſſible, having never been done, nor never like to be, I rather adviſe that every particular Merchant be obliged to take care that his Exports be equivalent to his Imports, which would every Merchant do (tho' this would not diſcover the Groſs Summs of the Value of the Exportations and Importations in the whole body of Trade, which ſome have Induſtrioully ſought after in order to know the whole Ballance, yet) it would keep us without a Ballance of Trade, or that it would not lie on our ſide, which would certainly for the moſt part keep the Courſe of Exchange up to the Par.

3. A ſecond Rule may be, that the Government take care that no Money be made or permitted to paſs Currant, that is not according to the preſent Standard for Weight and Fineneſs, for it was on this Rock, of ſuffering baſe and clipt Money to paſs, that we had like to have ſplit very lately, and which had miſerable Effects on Trade, and more particularly on the Courſe of Exchange.

4. A third Rule may be, That Embargoes be not laid on Shipping outward or inward, eſpecially the former, unleſs upon extraordinary Occaſion, and that if an Embargo be laid for any conſiderable time it may extend to Shipping inward for the ſame time it does to thoſe outward.

5. A fourth Rule may be, That before any Commodity be prohibited or encouraged to be Exported or Imported, the moſt able and diſintereſted Merchants be conſulted, who are moſt likely to diſcern the Conſequences thereof, and that no Goods be prohibited eſpecially Exportation without abſolute neceſſity.

6. That

6. That due encouragement be given to Importation of Gold and Silver Bullion.

§. 5. *Concerning Interest of Coin.*

Among the various uses of Money this of lending at Interest is said to be most unnatural, because remotest from its natural Institution and Use of Money which was for a pledge in Buying, &c. but notwithstanding that, it is certainly little inferior in Advantage both to Lender and Borrower, to the other Uses made thereof; nor is it accounted by any but Enthusiastical Conceited Heads, a Use less warrantable than any other that is made of Money, lending and borrowing Money upon Interest being a thing practised by most if not all the Governments in the Trading part of the World.

2. The two material things considerable in Borrowing and Lending Money at Interest (to say nothing of Securities) is,

1. The Rate of Interest,
2. To the Time of Payment.

3. The Rate of Interest is the Summ given for the use of 100*l.* for one Year, and this is in some places more, in others less, which is generally proportioned to the Plenty or Scarcity of Money and Trade, or Dearness and Cheapness of things: Thus in *Italy* and *Holland* the Rate is 3 *l. per Cent.* in *Swedeland* 6; *France* 7; *Spain*, *Scotland* and *Barbadoes* 10; *Ireland* 12, and *Turky* 20 *per Cent.* from which different Rates the Ingenious Sir *Josiah Child* makes many curious Remarks in his Discourse concerning Trade, to which I referr the Reader that is inquisitive after the Policy of these matters, this Book being chiefly designed for practice; and as for the Rate in *England* it is by a Statute made 12 *Car.* 2. Chap. 13. 13 *Car.* 2. Chap. 14. not to exceed 6 *l. per Centum per Annum*, which because some People are ignorant of I shall incert the Penalty in the Act mentioned, *viz.*

Whereas the Abatement of Interest from Ten in the Hundred in former times hath been found by notable Experience beneficial to the Advancement of Trade and Improvement of Lands by good Husbandry, &c. *And whereas in fresh Memory the like fall from* 8 *to* 6 *in the Hundred by a late constant practice, hath found the like Success to the general Contentment of this Nation, as is visible by several Improvements*, &c.

Be it for the Reaſons aforeſaid Enacted by the King's Moſt Excellent Majeſty, and the Lords and Commons in Parliament aſſembled; That no Perſon or Perſons whatſoever from and after the Twenty ninth of September, *in the Year of our Lord One thouſand ſix hundred and ſixty, upon any Contract ſhall from and after the ſaid Twenty ninth of* September *take directly or indirectly for Loan of any Monies, Wares, Merchandizes, or other Commodities whatſoever above the Value of Six Pounds for the forbearance of One hundred pounds for a Year, and ſo after that Rate for a greater or leſſer Summ, or for a longer or ſhorter Time. And that all Bonds, Contracts and Aſſurances whatſoever made after the Time aforeſaid for payment of any Principal or Money to be lent or covenanted to be performed upon; or for any Uſury whereupon or whereby there ſhall be reſerved or taken above the Rate of ſix pounds in the Hundred as aforeſaid, ſhall be utterly void. And that all and every Perſon or Perſons whatſoever, which ſhall after the time aforeſaid, upon any Contract to be made after the ſaid Twenty ninth day of* September, *take, accept and receive by way or means of any corrupt Bargain, Loan, Exchange, Chevisance, Shift or Intereſt of any Wares, Merchandize, or other Thing or Things whatſoever; or by any deceitfull Way or Means, or by any Covin, Engine or deceitfull Conveyance for the forbearing or giving Day of Payment for one whole Year of and for their Money or other Thing, above the Summ of ſix pounds for the forbearing of One hundred pounds for one Year, and ſo after that Rate for a greater or leſſer Summ, or for a longer or ſhorter term ſhall forfeit and loſe for every ſuch Offence the treble value of the Monies, Wares, Merchandize and other things ſo lent, bargained, ſold, exchanged or ſhifted,* &c.

4. The time at which the Intereſt of Money is payable, is uſually either Yearly, ½ Yearly or Quarterly; but when the Intereſt is payable Quarterly it is more advantageous to the Lender and loſs to the Borrower, becauſe the Lender tho' he receive but 6 Pound *per Cent. per Ann.* yet if he receive 30 *s.* every Quarter he has the uſe of that 30 *s.* the 2d Quarter; of 3 *l.* the 3d Quarter, and 4 *l.* 10. *s.* the 4th Quarter, which the Borrower would have had the uſe of had the Intereſt been but payable yearly, which difference in the times payable making difference in the Amount or Improvement of the Principal will farther appear by and by.

5. Intereſt is either Simple or Compound.

6. Simple

6. Simple Interest is the Interest of the Principal Money first put out to Interest; as if I put 100 *l.* for 2 Years to receive 6 *per Cent. per Ann.* Simple Interest, the Principal will be 100 *l.* and the Interest 12 *l.*

7. Compound Interest is so called because the Interest payable arises from the Principal and Interest due thereupon jointly: as if I put out 100 *l.* for 2 Years to receive 6 *l. per Cent. per Ann.* according to the utmost improvement, the Interest as it becomes due being not received but forborn: In this case the 100 *l.* at the first Years end will be augmented to 106 *l.* which 106 *l.* is my Principal for the 2d Year, and at the determination thereof will be encreased to 112 *l.* 07 *s.* $02\frac{1}{2}$ *d.* which is 100 *l.* Principal, 12 *l.* for the two years Simple Interest, and 7 *s.* $2\frac{1}{2}$ *d.* the Interest of 6 pounds my first years Interest for the 2d. year.

8. As there is more advantage to the Lender by receiving Compound Interest than Simple, so there is more advantage when Interest forborn is payable half yearly than yearly: Thus 100 *l.* at Simple Interest at 6 *l. per Cent. per Ann.* will be 200 *l.* in 16 years 8 Months; at Compound Interest it will be 200 *l.* in 11 years 11 Months at the rate aforesaid, or if forborn 7 years it will be augmented to 150 *l.* 07 *s.* $03\frac{1}{2}$ *d.* if the Interest was payable yearly, but if half yearly the 100 *l.* in 7 years will be encreased to 151 *l.* 05 *s.* 02 *d.*

Case. 1.] When you would find the Simple Interest of any Summ for 1, 2, 3, 4, *&c.* Years.

Rule.] Make 100 *l.* the first Number in the *Golden-Rule*, the Rate of Interest, or Interest of 100 *l.* the second Number, and the Summ given the third Number, and work as before taught in the Rule of Direct Proportion; and having found the Interest for one Year, multiply it by the Number of Years, and you have the Answer.

Example.] What is the Simple Interest of 500 *l.* for three Years, at 6 *l. per Cent.*

100 : 6 :: 500
6

30.00 One years Interest
3 Years ——— } Multiply

90 Pounds, Answer.

Example 2.] What is the Intereſt of 74 *l.* for ſeven Years ſimple Intereſt, being computed at 3 *l. per Cent. per Annum*?

l. *l.* *l.*
100 : 3 :: 74

2,22 *l.* 1 Years Intereſt for 74 *l.* } Multiply.
7 Years }

l. *s.* *d.*
15,54 *l.* Anſwer, or 15 : 10 : 9½

Caſe 2.] When the Intereſt of any Summ is required for any Time leſs than a Year.

Rule.] Find the Intereſt of the Summ given for a Year; then ſay, if 365 Days require the Intereſt found, what Intereſt will the Days, for which the Intereſt is to be computed, require? multiply and divide, and the Quotient is the Anſwer.

Example.] What is the Intereſt of 750 *l.* from the Fifth of *June*, to the Firſt of *December* following, at 8 *l. per Cent. per Annum*?

By your *Almanack*, or otherwiſe, you will find between the ſaid Times 178 Days. And that the Intereſt of 750 *l.* for 1 Year is 60 *l.* therefore ſay, if 365 Days require 60 *l.* what will 178 Days require? multiply and divide for the Anſwer: See the Work.

100 : 8 :: 750
8

l. 60.00 The Intereſt for 365 Days.

Days. *l.* *Days.*
365 : 60 :: 178
60

l. *s.* *d.*
365) 10680.000 (29.260 *l.* or 29 : 5 : 2½ Anſwer.

A TA-

A TABLE of Simple Interest at any usual Rate,

Viz. At 3, 5, 6 or 8 *l. per Cent. per Annum*, from 1 *l.* to 1000 *l.* for one Day, and may likewise serve for any greater Summ, Number of Days, or Rate of Interest.

l.	3 *l. per C.* 1 Day.	5 *l. per C.* 1 Day.	6 *l. per C.* 1 Day.	8 *l. per C.* 1 Day.
1	.0000821	.00013698	.00016438	.00021917
2	.0001642	.00027397	.00032876	.00043835
3	.0002463	.00041095	.00049315	.00065753
4	.0003284	.00054794	.00065753	.00087671
5	.0004105	.00068493	.00082191	.00109589
6	.0004926	.00082191	.00098629	.00131506
7	.0005747	.00095890	.00115068	.00153424
8	.0006568	.00109568	.00131506	.00175342
9	.0007389	.00123287	.00147944	.00197260
10	.0008219	.00136986	.00164383	.00219178
20	.0016438	.00273972	.00328766	.00438356
30	.0024657	.00410959	.00493149	.00657534
40	.0032876	.00547942	.00657532	.00876712
50	.0041095	.00685930	.00821915	.01095890
60	.0049314	.00821916	.00986298	.01315068
70	.0057533	.00958902	.01150681	.01334246
80	.0065752	.01095888	.01315064	.01753424
90	.0073971	.01232874	.01479447	.01972602
100	.0082191	.01369863	.01643835	.0219178
200	.0164382	.02739726	.03287670	.0438356
300	.0246573	.04109599	.04931505	.0657534
400	.0328764	.05479462	.06575340	.0876712
500	.0410955	.06849315	.08219175	.1093890
600	.0493146	.08219278	.09863010	.1315068
700	.0575337	.09589141	.11506845	.1534246
800	.0657528	.10959004	.13150680	.1753424
900	.0739719	.12328867	.14794515	.1972602
1000	.082191	.13698630	.16438356	.219178

Advertisement.] They that do not understand Decimals may see my large Table of Simple and Compound Interest.

The

The Construction and Use of the foregoing Table.

The first Column toward the Left-hand, is the Summ of which you would know the Interest, the second is the Interest of any of those Summs for one Day, at 3 *l. per Cent. per Annum*; the third is the Interest of any of those Summs for one Day, at 5 *l. per Cent. per Annum*, the fourth the Interest for the same Time, at 6 *l. per Cent. per Annum*, and the fifth at 8 *l. per Cent. per Annum*, for one Day. The use of which is thus:

Suppose I would know (as in the Example of the second Case foregoing) the Interest of 750 *l.* for 178 Days, at 8 *l. per Cent.*

Look in the Table against 700 *l.* and you will find under 8 *l. per Cent.* .1534246, which is the Interest of 700 *l.* for one Day, at 8 *l. per Cent.* and against 50 *l.* under 8 *l. per Cent.* you'll find .0109589, which is the Interest of 50 *l.* for one Day, at 8 *l. per Cent.* the Summ of which is .1643835, which multiply by the Number of Days your Summ is forborn (which in this Example is 178 Days) and the Product is the Answer; which in the Example aforesaid is 29.260 *l.* or 29 *l.* 5 *s.* 2$\frac{1}{2}$ *d.*

Example 2.] Suppose I have bought Goods to the Value of 1000 *l.* for which I am to pay at the End of 6 Months by Contract; but a Week afterward I agree to pay the said Money presently, for which I am to have rebate at 8 *l. per Cent.* how much Money must I pay?

In six Months wanting one Week, are 175 Days; therefore multiply the Number in the Table, against 1000, under 8 *l. per Cent.* viz. .219178 by 175 Days, and the Product is 38.356 *l.* which I am to be abated of my 1000 *l.* and am therefore to pay but 961 *l.* 12 *s.* 10$\frac{1}{2}$ *d.*

.219178
175

1095890
1534246
219178

38.356150

Case 3.

Caſe 3.] When you would find the Compound Intereſt of any Summ,

Rule] Make 100 *l.* the firſt Number in the Rule of Proportion, 100 *l.* and its Intereſt for a Year the ſecond Number, and the Summ you would know the Intereſt of the third Number; then multiply and divide, and the Quotient is the Principal given, and Intereſt required for one Year; which make the third Number in the Rule of Proportion, continuing the firſt and ſecond Number as before, *&c.* So that for every Year your Money is forborn, you have one Operation in the Rule of Proportion.

Example.] What is the Amount of 550 *l.* 10 *s.* for three Years Compound Intereſt, computed at 6 *l. per Cent. per Annum*? See the Operation.

l.	*l.*	*l.*	
100:	106::	550.5:	
		106	
		33030	
		5505	
100:	106::	583.530	The firſt Years Amount.
		106	
		350118	
		58353	
100:	106::	618.5418	The ſecond Years Amount.
		106	
		37112508	
		6185418	
		655.654308	The Amount for three Years; or 655 *l.* 13 *s.* 1 *d.* which is the Anſwer.

Caſe 4.] When it is required to find the preſent worth of any Summ of Money due at the end of any Number of Years yet to come, Intereſt diſcounted at 6 *l. per Cent. per Annum.*

Rule.]

Rule.] Say as 106 *l.* (the Principal and Intereſt of 100 *l.* for one year) is in proportion to the preſent worth thereof: So is any Summ due a Year hence to the preſent worth thereof. And ſo for any other Summ or Time.

Example.] What is the preſent worth of 655 *l.* 13 *s.* 01 *d.* due at the end of 3 Years to come, Compound Intereſt diſcounted at 6 *per Cent. per Annum?*

The Decimal of 13 *s.* 1 *d.* is .654308 *l.*

Therefore ſay, *l.* *l.*

106 *l.* : 100 :: 655,654308

100

l.

106) 65565430800 (618.5418 = the worth at the end of one Year, which is the 3d Number in the next working.

196

905

574

443

190

848

0

2*dly.* Say, 106. 100:: 6185. 418

100

l.

106) 61854.1800 (583.53 = the worth at the end of two Years to come, which is the 3d Number in the next Operation.

885

374

561

318

0

3*dly.* Say, 106. 100:: 583.53

100

l.

106) 58353.00 (550.5 = the preſent worth, due at the end of 3 Years, or the Anſwer; which is 550 : 10 : 00

535

530

0

There

There is a much briefer way of finding the Compound Intereſt, which is done for any Number of Years, at one Operation by Artificial Numbers, called *Logarithms*; but ſince that kind of Arithmetick falls not within the Subject of this Book, which tends chiefly to accompliſh the Young Merchant; and ſince Compound Intereſt is ſeldom either taken or given by great Traders, I ſhall therefore omit the former, and ſay no more of the latter.

§. 6. *Concerning Equating Time of Payment.*

When ſeveral Summs of Money are due at ſeveral Times, and the Debtor and Creditor agree to make but one Payment of the whole, it may be done without Loſs to either by this

Rule.] Multiply every Summ of Money by the time it becometh due, and divide the Summ of the Products by the total Debt, and the Quotient is the true Time, at which the money ought all to be paid.

Example.] Admit I have 1200 *l.* owing me, to be paid at 4 ſeveral Payments, *Viz.* 500 *l.* at two months end, 300 *l.* at 6 months, 200 *l.* at ten months, and 200 *l.* at twelve months; the Queſtion is, at what time the whole may be paid at one Payment, without wrong on either ſide?

	l.		*Mo.*	*Products.*			
	500	x	2	= 1000	Dividend	*Month.*	
Diviſor	300	x	6	= 1800	7200	+ (6	= Quotient,
1200	200	x	10	= 2000			or Anſwer.
	200	x	12	= 2400			

By the Work you ſee the whole Debt ought to be paid at the end of ſix months, which is the true Equated Time.

Note, that (x) ſignifieth [multiplied by] and (=) [equal to.]

§. 7. *Concerning Gain and Loſs in the Practice of Merchandize.*

Caſe 1.] When Goods are bought at any Rate, and you deſire to know how to retail the ſame, ſo as to gain a certain Summ by the Sale.

Rule.] As the whole Quantity of the Goods bought
Is in proportion to the Total of the Summ given for the Goods, and the Summ propoſed to be gained;
So is any part of the Commodity,
To a fourth Number, for which if you ſell the ſaid Part, you will gain the Summ deſired by ſale of the Whole.

Example. Admit a Druggiſt buyeth 158 Ounces of black Ambergreece for 230 *l.* I demand how he may ſell the ſame (by the Ounce *Troy*) to gain 50 *l.* by the bargain. Say,

℥.	*l.*	℥.	*l.*		*l.*	*s.*	*d.*
158 :)	280 : :	1 :	(1.772	Anſwer, or	1 :	15, :	5¼ *per* Ounce.

280.000

1220

1140

340

24

Caſe.] When you would gain a certain Summ *per Cent.* by the Sale of any Commodity, to know how to ſell the ſame.

Rule.] Conſider what the whole Value of your Goods will gain, at your propoſed Rate *per Cent. per Annum*; then work as in the laſt Caſe.

Example.] A Furrier buyeth 2100 ℔ of *New-England* Bever for 700 *l.* 14 *s.* how may he ſell the ſame *per* Pound, to gain at the Rate of 20 *l. per Cen. per Annum*?

The

The Operation is thus performed.

l. *l.* *l.*
100 : 20 :: 700.7
20

140.140
700.7

840.84 ℔ ::
840.8400
..

84

0

l. *s.*
The propoſed Gain by 700 : 14
Add

℔ *Bever* ℔ *Bever*
2100 :) 1 *s.* *d.* *q.*
(.4004 ℔ or 8 : 0 $\frac{1}{3}$ *per* ℔
but 8 *s.* will anſwer your deſire, wanting only 16 *s.* 9$\frac{1}{2}$*d.* at the whole.

Caſe 3.] When Goods are bought at a certain Price, and afterwards ſuſtain Damage, and muſt therefore be ſold at an under Rate, to know how to ſell the ſame to loſe a certain Summ.

Rule.] Firſt, find the Value of the Goods at the Rate you gave for them, from which deduct what you are willing to loſe, and work the Remainder in Proportion, as in the two laſt Caſes.

Example.] An Oylman buyeth of a Merchant 2100 ℔ of *Weſtphalia* Ham, for which he gives 9 *d. per* Pound; but having ſuſtained Damage, he is willing to loſe 8 *l.* 15 *s.* by the Sale, at what price muſt he ſell the ſame to loſe juſt that Summ?

The Value of the Hams by Practice is 78 *l.* 15 *s.*

$\frac{1}{40}$ of 2100 at 9 *d.*

is = 52 *l.* 10 *s.*
$\frac{1}{80}$ is = 26 *l.* 5

Facit 78 *l.* 15 *s.*

l. *s.*
78 : 15
The loſs 8 *l.* 15 deduct

2100 : 70 :: 1

2100) 70.000 (.033 *l.* Anſwer.
.

70

7

By the Work I find he muſt ſell for 8 *d. per* ℔

The laſt Queſtion is more briefly reſolved thus:

If 2100 *l.* loſe 8.750 *l.* what will 1 ℔ loſe?

2100) 8.750 (.004 *l.* or 1 *d. per* Pound loſs.

So muſt he ſell it for 8 *d. per* ℔ as was taught before.

Caſe 4.] When Goods are bought at one Price, and ſold for a greater, to be paid at Time; to know what you gain by 100 *l.* in a Year at that Rate.

Rule] Say by the Double Rule of Direct Proportion foregoing. As the Price your Goods (or any part) coſt you, is to the gain by ſuch Goods, or part in the Time you truſt the Buyer:

So is 100 *l.* in 12 months to the Summ gained thereby for Anſwer.

Example.] A Merchant bought 17 *C.* 2 *Qrs.* of Logwood at 20 *s.* 6 *d. per* Hundred ready money, and ſold the ſame to a Dyer for 25 *s. per* Hundred, to be paid at the end of 6 months; the Queſtion is what he gained at that Rate by 100 *l.* in a Year. See the Work as by the Rule above.

s.

1 Hundred coſt the Merchant 20.5

He ſold the ſame for 25

His gain by 1 Hundred = 4.5 Then ſay,

s. *Mo.* *s.* *l.* *Mo.*

If 20.5 : 6 : 4.5 : 100 : 12

6 4.5

123.0 450.0

12

l.

123) 5460.000 (44.390 Anſwer,

l. *s.* *d.*

or 44 : 7 $9\frac{1}{2}$ *per Cent. per Ann.*

540

480

1110

30

§. 8. *Con-*

§. 8. *Concerning Fellowſhip, or Trading in Company.*

Caſe 1.] When two or more Merchants make a common Stock, and by Trade gain or loſe a certain Summ; to know what each gaineth or loſeth in proportion to his ſhare of the common Stock.

Rule.] Divide the whole Loſs or Gain by the whole Stock, and multiply the Quotient in each man's Share of the Stock, and the ſeveral Products are the reſpective Gain or Loſs of each particular Merchant.

Example.] Three Merchants make a common Stock of 16000 *l.* of which

7000 *l.* was put in by the firſt Merchant,
5000 *l.* by the ſecond; and
4000 *l.* by the third.

and by one Voyage they gain 24000 *l.* what muſt each have in proportion to his Share?

7000 *l.*
5000 *l.*
4000 *l.*
——— *gain.*

The whole Stock = 16000) 24000 (1. 5 = the multiplier.
16000
80
0

l.		
7000	Multiplied by	10500.0 = the Profit of the 1ſt.
5000	1.5 produceth	7500 = of the 2d.
4000		6000 = of the 3d.

Caſe 2.] When ſeveral Merchants make a common Stock for a certain Time, and at the end thereof make a Dividend, to find each man's Share of the Gain or Loſs according to his Stock and Time.

Rule

Rule.] Multiply each Man's Share in the common Stock, by the Time it continued therein, and proceed with the Products, as with the Shares in the last Case.

Example.] Two Merchants make a common Stock for 12 Months; the first put in 2400 *l.* for 8 Months, the second put in 3000 *l.* for 12 Months, at the end whereof they make a Dividend of 1680 Pounds gain; how much of that Gain shall each have in proportion to his Stock and Time of Continuance?

l	*Mo.*	*Products.*
2500	× 8	= 20000 ←.
3000	× 12	= 36000 ←.

Gain divide

Summ = 56000) 1680.000 (.030

168

00 remains.

			l.	
103 Multiply'd by	20000 *l.*	produceth	600.00	The 1*st.* gain'd.
	36000 *l.*		1080.000	The 2*d* gain'd.

The total Gain = 1680 for proof.

I might have inserted more of these and such like Examples, but one being sufficient to explain a General Rule, I shall proceed to the next Chapter.

CHAP.

CHAP. X.

Treateth of Book-keeping by Debtor and Creditor.

HAving in the foregoing Chapters given the young Merchant the Grounds and Reaſons of Arithmetick, and Rules for caſting up any thing that may occur in his daily buſineſs; I come in this Chapter to ſhew him how to place the ſame to Accompt; and that I may do it with all the plainneſs I can, and in as few words, I ſhall proceed to ſhew,

§. 1. *The Explanation of this kind of Book-keeping, and the Books requiſite to be kept, and their Uſe.*

The Method of keeping Books by way of Debtor and Creditor, or (as ſome call it) after the *Italian* manner, Is ſo regular and preciſe, that at any Time the Merchant can be reſolved what he gaineth or loſeth by every particular Perſon he dealeth with, or Merchandize he dealeth in, and conſequently what he is worth to a Farthing. And for your information how theſe Books are kept, take this

General Rule:

Any thing whatſoever is received either by the Merchant, or any way for his Accompt by his Servants, whether the ſame be Money or Wares: I ſay the thing ſo received for, or upon his Accompt, is in the Ledger (which ſhall be ſpoken to by and by) made Debtor to the Perſon receiv'd from, or thing for which it is received.

Alſo every thing whatſoever is deliver'd from the Merchant upon any Accompt, whether Money or Wares, the thing ſo delivered by the Merchant, or any way for his Uſe or Accompt, is in the Ledger made Crediticor By the Perſon to whom, or thing for which the ſame is delivered. My meaning in this Rule ſhall be fully made appear in all the uſual Caſes of a Merchants Dealing, after I have ſhewed the Books neceſſary for keeping Accompts after this Method, which are as followeth.

1. The **Waſte-Book** is that wherein every thing is entered, whether bought, ſold or bartered, as alſo all Goods ſhipp'd, or Advice receiv'd.

receiv'd of their Sale, money lent or receiv'd at Intereſt, *&c.* (but not money receiv'd or paid for Goods that were ſold or bought at Time, nor for petty Expences, *&c.* which I enter only in the Caſh-book, and poſt it thence into the Ledger, which is ſufficient) together with the Time when, by the day of the month incerted in the middle of the Page, with the year of our Lord; and is of no farther uſe, but only to remind the Book-keeper, that ſuch and ſuch Buſineſs is to be poſted into the Journal, the Caſh being never ſummed up in this Book, it being ſeveral mens Accompts of Receipts and Payments placed together promiſcuouſly.

2. The **Journal** is a Book into which every thing is poſted out of the Waſte-book, which is here to be made Debtor, and ought to be expreſſed in a better Stile or Phraſe of ſpeaking, and fairly written more Merchant-like, it being, as it were, a Preparatory to the Ledger, whereby is ſhewed what Accompts are to be entred Debtor therein, and to which Book Recourſe can only properly be had for the particular of any Accompt ill wrote, or worded in the Waſte-book, or entered but briefly in the Ledger, as all Accompts uſually are. In this Book the Day of the month is alſo placed in the middle of the Page, which is never ſumm'd up, unleſs it contain only one man's Accompts, for the Reaſon aforeſaid.

3. The **Ledger** is the chief Book of Accompts, and that in which all Accompts meet, and are placed Debtor on the Left-hand Page, and Creditor on the Right; ſo that the Folio's on the Right and Left-hand in this Book are numbered alike; becauſe one and the ſame Accompt is placed on both ſides. In this Book the Day of the month is placed in a narrow Column toward the Left-hand of the Page, and the Name of the month to the Left-hand the Day. At the Head of each Folio in this Book, is written the Name of the City or Place where the Books are kept, with the Year; all which you will ſee in the Example of theſe three Books, after the ſeveral Caſes. The Denomination of moſt of your Accompts to be entered in this Book, are thus ranked and explained.

Firſt, place your Account of Stock at the beginning of your Ledger, *viz.* make Stock Debtor to what you owe, when you begin to keep your Books, let the Debt be upon what Accompt ſoever, in theſe words, on the Left-hand Folio, as it lieth before you:

Stock

Stock Debtor,

To ſundry Accompts, as *per* Inventory, ſo much as the ſame is; and firſt of all, having taken an Inventory of all you are worth in Caſh, Wares, or Debts (as you ſee in the Inventory following) write on the Right-hand Folio the Summ of what you are worth, as apeareth by the particulars in the Inventory, making Stock Creditor in theſe words.

Per contra Creditor,

By ſundry Accompts, as *per* Inventory, mentioning the Value of all the Caſh, Wares and Debts you have.

The next thing (on the ſame Folio) is the Accompt of Caſh; where note, that before you enter any thing Debtor or Creditor in your Ledger you are to look whether you have any thing of the ſame Denomination in your Inventory, which if you have, you muſt the firſt thing in the Accompt, make it Debtor to Stock for ſo much as is in the Inventory of that Accompt, as ſuppoſe you have in ready Caſh at the time of taking your Inventory 2000 *l.* you muſt make, firſt

Caſh, Debtor,

To Stock ——————————— *l.* 2000:00:00

And afterwards make the ſame Accompt Debtor to ſundry Accompts as *per* Caſh-Book. And the ſaid Perſons of whom you receive, or Wares for which you receive Money, muſt be made in their own Accompt Creditor by Caſh, according to the general Rule foregoing, as ſhall be ſhewn in the Caſes following.

Next to the Accompt of Caſh in your Ledger, you may put what Accompt occurrs in practice; as the Accompt of Men, Wares, Voyages, *&c.* as,

When you ſhip off Goods to your Factor to be ſold for your Accompt, you are in this Book to keep an Accompt of the Voyage in a place by it ſelf, as you do the reſt, making *Voyage to ſuch a place (mentioning the Port or Place your Factor reſideth at) conſigned to ſuch a Perſon (mentioning your Factor's Name) Debtor* to the Goods ſhipped. To Cuſtom, Inſurance, and all other Charges of the ſame, and the contrary Accompts Creditor by Voyage.

When you have advice that the Goods ſhipp'd are ſold, then in ſome one place make *Factor at ſuch a place, my Accompt currant Debtor* to Voyage; And the Voyage Creditor by the Accompt currant, *&c.*

In this Book is alſo kept the Accompt of Profit and Loſs, by it ſelf thus:

Profit and Loſs Debtor.

To Caſh for what Money you pay and have nothing for it; as to Rebate of Money paid you before due; To Abatement by Compoſition, when a Perſon is inſolvent; To Houſhold Expences, Servants Wages, *&c.* And,

Per contra Creditor.

By Caſh for all you receive, and deliver nothing for the ſame; as by Money received with an Apprentice; by Rebate for paying a Summ before due; for Legacy left you by a Friend, and by the Summ you gain; by every particular Commodity you deal in; by Ships in Company; by Voyages, *&c.*

4. The **Caſh-Book** is that wherein you enter all the Money you receive upon any Accompt, on the Left-hand Folio, making Caſh Debtor to the thing you receive it for, if it is received for Goods then ſold, but if not, to the Perſon you receive it from, as in the Example of a Caſh-Book, *&c.* and on the Right-hand Folio enter all the Caſh you pay, Creditor by the Perſon you pay it to (mentioning whether it is in full or in part) or thing you pay it for, if paid for Goods then bought, and place the Day when you receive or pay it as in the Ledger, and once in a Month, or oftner, ſumm up your Accompt of Caſh received and paid, carrying the Summ to the Accompt of Caſh in the Ledger, which Accompt, without this Book would ſwell too big, provided you ſhould enter the particulars there.

5. It is neceſſary you ſhould keep a Book to enter all the Caſh in which you expend in Houſe-keeping, and once in a Month transfer the ſame into the Creditor ſide of the Caſh-Book, and then into the Debtor-ſide of the Ledger, thus:

Houſhold

Houſhold Expences, Debtor.

To Caſh, ſo much as you bring from your Book of Houſhold-Expences; and Caſh is made Creditor, by Houſhold-Expences, in your Caſh-Book. For the Monthly Summ ſpent in Houſe-keeping, and brought from the Book of Houſhold Expences. In this Book is likewiſe proper to enter the Charge of Apparel, Rent of your Dwelling-Houſe, Pocket-Expences, Servants Wages, *&c.* as in the following Book of Houſhold-Expences.

6. **A Book of Charges of Merchandize,** Wherein you muſt enter the charge of Cuſtom, Freight, Ware-Houſe Room, Poſtage of Letters, Porterage, Cartage, Wharfage, Books of Accompts, *&c.* and once in a Month make a Summ, and transfer it into Creditor-ſide of your Caſh-Book, making a Referr to the Folio of the Book of Charges of Merchandize; and alſo into the Debtor-ſide of the Account of Charges of Merchandize in your Ledger.

7. **A Book of Factories or Invoyces,** Which is an account of Goods ſhipt or ſent by you to your Factor, or received from him, *&c.* In this Book, enter the Goods ſent or ſhipt to be ſold for your Account, with the value and Time when ſent on the Left-hand Folio; and as you receive Advice of their Sale, enter the ſame on the Right-hand Folio; ſo may you readily ſee how the Account ſtands in that Particular.

8. Beſides theſe Books, the Merchant ought to have a Book wherein to enter a Copy of all Letters he ſendeth or receiveth upon Accompt of Trade: Alſo,

9. A Pocket-Book to take the Minits of what buſineſs you do abroad, for the eaſe of your Memory, and to avoid Error.

10. A Bill-Book, or ſmall Book wherein to enter all Bills of Exchange the Merchant accepteth, with the Summ and Time when payable, and to whom; or if foreign Bills, a Copy of the Bill; and as you pay the ſame, write [*Paid*] in the Margin againſt the Bill paid.

11. Laſtly, A Book of Receipts, wherein to take all Receipts for Money you pay: Expreſſing firſt the Day of the Month, then the Summ received, and for what, or whether in full or in part, and for whoſe uſe, which muſt be Signed by the Perſon receiving.

Thus have I given you an Account of all the Books neceſſary for a Merchant to keep, eſpecially if he is a great Dealer; alſo the Nature of the Account to be inſerted in each Book, and the Uſe thereof. I ſhall next proceed to give ſuch particular Directions as will enable the Book-keeper to find Proper Debtors and Creditors, for moſt, if not all the Caſes he will meet with in the Practice of Merchandize.

§. 2. *Sheweth how to enter in your Ledger proper accounts in Domeſtick Trade.*

Definition. PRoper Accounts in Domeſtick buſineſs is, when the ſame is wholly managed by the Merchant or his Domeſtick Servants; as in the Caſes following.

Caſe 1. When Money is received for a Debt.
Rule. [Caſh Debtor] To him for whoſe Account it was paid.
The paying-Man's Account, Creditor, by Caſh.

Caſe 2. When preſent Money is received for Wares.
Rule. [Caſh Debtor] To the Wares ſold, the ſumm received.
Goods ſold Creditor By Caſh for the ſame ſumm.

Caſe. 3. When Money is paid for Wares, preſently, as ſoon as bought.
Rule. [Wares bought, Debtor] To Caſh for what paid.
Caſh Creditor, By Wares bought, in the ſame Summ.

Caſe 4. When I pay Money that was due formerly.
Rule. [The Receiver's Account] Debtor, To Caſh for what paid.
Caſh Account, Creditor, By the Perſon receiving.

Caſe 5. When Money is taken at Intereſt.
Rule. [Caſh Debtor] To the Lending-man for the Principal I receive.
[Profit and Loſs] Debtor to the Lending-man for the Intereſt coming due to him.
The Lending-man Creditor By ſundry Accounts, referring to the Folio's of Caſh, and Profit and Loſs.

Caſe 6. When Money is lent at Intereſt.
Rule. [The Borrowing-man] Debtor to ſundry Accounts, referring to the Folio's of Caſh, and Profit and Loſs.
Caſh-Creditor by the Borrowing-man for the Principal lent.
Profit and Loſs Creditor By the Borrowing-man for the Intereſt.

Caſe 7.

Caſe 7. When Intereſt-money is paid by me, and the Principal continued.

Rule. [Profit and Loſs] Debtor to Caſh for the Summ paid.
Caſh Creditor by Profit and Loſs for the ſame ſumm

Caſe 8. When Money is received by me for Intereſt, and the Principal continued.

Rule. [Caſh Debtor] To Profit and Loſs for the Intereſt received.
Profit and Loſs, Creditor, by the paying-Man for the ſame.

Caſe 9. When I receive Money by Aſſignation.

Rule. [Caſh Debtor] To the Aſſignor for the Summ received.
The Aſſignor Creditor By Caſh for the ſame Summ.

Caſe 10. When I ſatisfie a Debt by Aſſignment of another due to me.

Rule. [The Receiver Debtor] To him on whom the Aſſignment is charged.
He on whom the Aſſignment is charged Creditor By the Accepter.

Caſe 11. When I pay Money to any, by my Creditor's Aſſignation.

Rule. [The Aſſignor] Debtor To Caſh for the Summ paid (mentioning to whom.)
Caſh Creditor By the Aſſignor for the ſame Summ, mentioning to whom paid, and by whoſe Aſſignation.

Caſe 12. When I receive part of a Debt, and (by Compoſition) give a Diſcharge in full.

Rule. [Caſh Debtor] To the Payer for the Summ received.
Profit and Loſs Debtor To him for the Summ I abate by Compoſition.
The paying-Man Creditor By ſundry Accounts, referring to the Folio's of Caſh, and Profit, and Loſs.

Caſe 13. When Wares are bought upon Time.

Rule. The [Wares bought Debtor] To the Seller for the value of them.
The Seller Creditor By the Wares bought, for the like Summ.

Caſe 14. When Wares are ſold upon time.

Rule. The [Buyer Debtor] To the Wares ſold for their value.
The Wares Creditor By the buying-man for the ſame Summ.

Caſe 15. When Wares bought are to be paid for at ſeveral Payments.

Rule. The [VVares Debtor] To the Seller for their value, (mentioning the ſeveral days of Payment in the Journal.)
The Seller Creditor By the VVares for the like Summ.

Caſe 16.

Caſe 16. VVhen VVares are bought part for Ready-Money, and part at time.

Rule. The [VVares bought Debtor] To ſundry Accounts, (referring to the Account of Caſh, and the Seller's Account by their Folio's.)
The Selling-man Creditor By VVares bought ſo much as is left unpaid; and Caſh Creditor By VVares for ſo much paid Ready-Money.

Caſe 17. VVhen ſundry Parcels of VVares are bought for Ready-money.

Rule. The ſeveral and [reſpective VVares] muſt be made Debtor to Caſh for the value it ſtands me in; and
Caſh Creditor by ſundry Accounts for the total value, referring to the ſeveral Folio's where the ſeveral VVares ſtand booked.

Caſe 18. VVhen ſeveral Parcels of VVares are ſold for Ready-Money.

Rule. [Caſh Debtor] To ſundry Accounts (referring to the Folio's VVhere the ſeveral VVares ſold are entred in the Ledger) for their whole value.
The reſpective VVares Creditor by Caſh.

Caſe 19. VVhen VVares are ſold part for Ready Money, and part at time.

Rule. The [Buyer Debtor] To VVares ſold, for the Summ unpaid.
[Caſh Debtor] To the VVares ſold for the Summ received in part.
VVares Creditor By ſundry Accounts (referring to the Accounts of the Buyer and Caſh) for the whole Summ for which the VVares are ſold.

Caſe 20. VVhen Wares are bought at time, and booked, and afterward, Ready-money is paid upon Rebate.

Rule. The [Seller Debtor] To Caſh for the Summ paid him (deducting the Rebate.)
Caſh Creditor by the Seller for the ſame Summ.
The [Seller Debtor] To Profit and Loſs for the Rebate.
Profit and Loſs Creditor By the Seller for the ſame Summ.

Caſe 21. When Wares are ſold at time, and booked, but Money received preſently after, for the ſame, allowing Rebate.

Rule. [Caſh Debtor] To the Buyer for the Summ received upon Rebate.

The

The Buyer Creditor By Caſh for the ſame Summ.

[Profit and Loſs] Debtor to the Buyer for the Summ rebated.

The Buyer Creditor by Profit and Loſs for the ſame Summ.

Caſe 22. When Wares are bought, and part paid Ready-money, part at time, and the reſt by Aſſignation.

Rule. [Wares Debtor] To ſundry Accounts, the Whole Value referring to the Folio's of the Seller's Account, Caſh, and his whoſe Bill is Aſſigned.

The Seller Cr. by the Wares for ſo much as is yet unpaid.

Caſh Cr. by the Wares for ſo much as is paid in Caſh.

[Him whoſe Bill you have aſſigned] Cr. By the VVares, ſo much as the Summ aſſigned is.

Caſe 23. VVhen VVares are ſold for part Ready-money, part by Aſſignation, and the reſt at Time,

Rule. [Caſh Dr.] To VVares the Summ received in part of the Buyer.

[The Perſon on whon the Aſſignment is made] Dr. To VVares, ſo much as is aſſigned.

[The Buyer Dr.] To VVares for the Summ he left unpaid.

VVares Cr. By ſundry Accounts referring to the Folio's of Caſh, the Perſon to pay the Money aſſigned, and the Buyer.

Caſe 24. VVhen in Lieu of a Debt you receive Goods, whoſe Value is more than your Debt, which Surplus is returned in Caſh immediately.

Rule. Make [VVares bought] Dr. To ſundry Accounts, referring to the Folio of the Payer's Account, and that of Caſh, in your Ledger.

The Payer's Account Cr. By VVares, the Summ paid him by agreement.

Caſh Cr. By VVares for the Surplus paid back.

Caſe 25. VVhen in Payment of a Debt you ſell Goods to your Cr. whoſe value exceeding his Debt, he returneth you the Overplus.

Rule. The [Buyer Dr.] To VVares for ſo much as his Debt was.

[Caſh Dr.] To VVares for the Overplus returned.

VVares Cr. By ſundry Accounts referring to the Folio's of Caſh and the Buyer's Account.

Caſe 26. VVhen VVares are bought in barter for other VVares.

Rule. The [VVares bought Dr.] To the VVares ſold for the value of the VVares ſold.

VVares

Wares ſold Cr. By Wares bought for the value of thoſe bought.

Caſe 27. When Wares are bought part for Wares and part for ready Money.

Rule. [Wares bought] Dr. To ſundry accounts, referring to the Folio's of Wares ſold, and Caſh.

VVares ſold Cr. By the VVares bought for the value of thoſe ſold.

Caſh Cr. By VVares bought for the Summ paid in Money.

Caſe 28. When Wares are ſold for part Wares, and part ready Money.

Rule. Make [VVares bought] Dr. To VVares ſold for what they Coſt.

Caſh Dr. To VVares ſold for the Summ received.

Wares ſold Cr. By ſundry accounts referring to the Folio's of the Wares bought, and Caſh.

Caſe 29. VVhen you pay Money for part of a Ship.

Rule. [Ship] (naming her) Dr. To Caſh for the Summ paid, naming the Maſter, and what part you have bought.

Caſh Cr. By the Ship, the Summ paid, mentioning to whom.

§. 3. *Accounts proper in Foreign Trade.*

Definit. PRoper Accounts in Foreign Trade, is, when the Merchant ſendeth Goods beyond the Sea, to ſome Correſpondent to be ſold for his Account.

Caſe 1. When you ſhip off VVares.

Rule. Make [Voyage to ſuch a place (mentioning the place whithere you ſend them) configned to your Factor, or Correſpondent (mentioning his Name) Dr] To the VVares ſhipped for their value, naming the Ship and Maſter's Name.

VVares Cr. By Voyage To, *&c.*

Caſe, 2. VVhen you would enter Charges of Goods ſhipp'd off.

Rule, Make [Voyage to the place whither your Ship is bound, Dr.] To Charges of Merchandize for the Summ paid on ——— (naming the Commodity.)

Charges of Merchandize Cr. By the Voyage for the ſame Summ.

Caſe 3. VVhen Money is received upon Inſurance.

Rule.

Rule. Make [Caſh Dr.] To Inſurance—Reckoning, Expreſſing what Summ you Inſure, to whom, and on what Accompt.
Inſurance Accompt Cr. By Caſh, *&c.*

Caſe 4. If the Goods you inſure are loſt.

Rule. Make [Inſurance—Reckoning] Dr. To the Perſon to whom you inſured the Summ loſt.
The Perſon to whom you inſured Cr. By Inſurance—Reckoning.

Caſe 5. When you pay Money for Inſurance.

Rule. Make [Inſurance—Reckoning Dr.] To Caſh for the Summ paid (mentioning the Summ inſured to you, by whom, and on what Accompt) and
Caſh Cr. By Inſurance Accompt, *&c.*

Caſe 6. If the Goods that are inſured to you are loſt.

Rule. Make [the Perſon that inſured Dr.] To Inſurance—Reckoning the Summ inſured, and
Inſurance—Reckoning Cr. By the Perſon that inſured to you.

Caſe 7. When you even the Accompt of Inſurance.

Rule. If the Summ on the Cr. ſide exceed that of the Dr. Make [Inſurance—Reckoning Dr.] To Profit and Loſs for that Exceſs. But if the Dr. ſide exceed the Cr. Make [Profit and Loſs Dr.] To Inſurance—Reckoning for that Exceſs, and in both Caſes *per contra Creditor*——

Caſe 8. When you receive Advice from your Factor, that Goods formerly conſigned to him are ſold——

Rule. Make (in ſome place in your Ledger) [Factor at—(mentioning the place he liveth at) my Accompt currant Dr.] To Voyage to ſuch a place, for the known Sale in Sterling-Money, being the Nett proceed of Wares, as by his Accompt on the File ſold for ſo much foreign Coin (mentioning the Exchange) then make Voyage to ſuch place, conſigned to ſuch Perſon (mentioning your Factor's Name) Cr. By my Factor at ſuch place my Accompt currant ſo much Sterling Money as you know by his Accompt, the foreign Coin of the Nett proceed amounts to.

Note, That the Nett proceed is when the Charges of Cuſtom, bringing the Goods from on Board into the Ware-houſe, Proviſion, *&c.* is deducted from the value the Goods are ſold for by a Factor.

Caſe 9. When Wares are bought upon Time, and ſhipp'd off before Entry in your Books.

Rule. Make [Voyage to ſuch a place conſigned to ſuch a Perſon, Dr.] To the Selling-man, naming the Quantity, Price, and other Conditions of buying and ſhipping off.
The Sellers Cr. By Voyage, *&c.*

Caſe 10. When Abatement is made by my Factor for defect in Goods he formerly ſold.

Rule. Make [Profit and Loſs Dr.] To Factor at—my Accompt currant (mentioning for what, and the Summ.)
Then make Factor at ſuch a place my Accompt currant Cr. By ſuch Summ, *&c.*

Caſe 11. When Wares are bought for Ready-money, and immediately ſhipp'd off before Entry.

Rule. Make [Voyage To—Dr.] To Caſh for the value of the Goods ſhipp'd, mentioning the Names of the Wares, Quantity and Charges, till on Board, *&c.*
Then Caſh Cr. By Voyage, *&c.*

Caſe 12. When you receive the unhappy News of your Goods being caſt away.

Rule. Make [Profit and Loſs Dr.] To Voyage to ſuch a place, conſigned to ſuch a Perſon, *&c.*
Then make Voyage Cr. By Profit and Loſs for the ſame Summ, *&c.*

Caſe 13. When I order my Factor beyond the Sea, to ſhipp off Goods to another Factor in another place.

Rule. [Voyage to ſuch a place conſigned to my receiving Factor] Dr. To my ſending Factor (mentioning their Names) my Accompt currant ſo much for ſuch a thing.
Then make my ſending Factor (mentioning his Name) at ſuch a place my Accompt currant Cr. By Voyage to ſuch a place conſigned to my receiving Factor (naming his Name and Place) for the ſame Summ.

Caſe 14. When I receive the Content of a Bill here, and thereupon draw the ſame on my Factor, to pay to the order of him that paid me.

Rule. Make [Caſh Dr.] to my Factor at ſuch a place my Accompt currant for ſo much Sterling received of ſuch a Perſon for my Bill drawn on Ditto Factor, payable by him to ſuch a Perſon, at ſuch a Time, ſo much Foreign Coin, which at ſo much Exchange makes Sterling ſo much.
Then make Factor at ſuch a place, my Accompt currant Cr. By Caſh, *&c.*

Caſe

Caſe 15. When I receive Wares in Return from my Factor or Correſpondent.

Rule. Make [Wares received Dr.] To Factor at ſuch a place, who ſent the Wares) my Accompt currant ſo much as the Wares coſt, mentioning what they are, *&c.*

Then Factor at ſuch a place, my Accompt currant, Cr. By Wares received for their value, *&c.*

Caſe 16. When I deliver a Bill here drawn upon my Factor beyond Sea, and receive not the Content till ſome time after.

Rule. The [Perſon to whom I deliver my Bill] Dr. To Factor at ſuch a place, my Accompt currant in ſo much Sterling for my Bill of ſo much foreign Coin drawn upon ſuch Factor, payable at ſuch a time, to ſuch a Perſon, or Order, the Exchange at ſo much Sterling, for ſo much foreign Coin makes Sterling——

Factor at ſuch a place my Accompt currant Cr. By the Perſon to whom I deliver my Bill.

Caſe 17. When I receive Money preſently, which is the Content of a Bill drawn on ſome Perſon here by my Factor.

Rule. [Caſh Dr.] To Factor at – (my Accompt currant) for ſo much received of ſuch a Perſon by Bill of Exchange payable at ſight, for the value paid there (*i. e.* beyond Sea by my Factor) to ſuch a Perſon.

Then Factor at——my Accompt currant Cr. by Caſh, *&c.*

Caſe 18. When I receive Advice that my Factor at one place has drawn a Bill on my Factor at another place.

Rule. Make [the drawing Factor my Accompt currant] Dr. To the paying Factor, my Accompt currant for ſo much foreign Coin drawn by—— payable at ſuch a time to ſuch a Perſon, ſo much foreign Coin, which at ſuch Exchange makes Sterling——

Then make the accepting Factor my Accompt currant Cr. by the drawing Factor, my Accompt currant mentioning both their Names, Summ, *&c.*

§. 4. *Factorage Accompts in Domeſtick Trade.*

Definit. THESE Accompts are when a Trade is managed by the Factor, or his Servants for the Employer, whom the Factor ſerveth in Commiſſion.

Caſe 1. When a Factor receives Wares from his Employer.

Rule. In ſome one place of your Ledger, make [the Accompt of Goods for your Employer,] Dr. to Caſh for ſo much paid Cuſtom, Freight, *&c.*

Then make Caſh Cr. By Accompt of Goods, *&c.* ſo much as paid.

Caſe 2. When Wares received in Commiſſion by a Factor, are ſold for Ready-money.

Rule. [Caſh Dr.] To Accompt of Goods for the Employer, the Summ received.

Then make Accompt of Goods for the Employer Cr. By Caſh the ſame Summ.

Caſe 3. When Commiſſion Wares are ſold by the Factor in Barter.

Rule. [Goods bought in Barter] Dr. To Accompt of Goods, for Accompt proper of the Employer for their Value.

[Accompt of Goods for Accompt, *&c.*] Cr. By Wares received the ſame Summ.

Caſe 4. When Wares in Commiſſion are ſold part for Ready-money, and part at time.

Rule. The [Buyer Dr.] To Accompt of Goods for Accompt proper of the Employer, the Summ left unpaid, Caſh Dr. To Accompt of Goods, *&c.* for the Summ received.

[Accompt of Goods for Accompt proper of the Employer] Cr. By ſundry Accompts for the total Value of the Goods ſold, referring to the Folio's of the Accompts of the Buyer, and Caſh.

Caſe 5. When Wares are ſent to an Employer in return with Charges in ſhipping off.

Rule. Make [Acompts of Wares for Accompt proper of the Owner] (or your Employer naming his Name] his Accompt currant] Dr. To the Goods ſhipp'd, naming the Value and Goods, with the Ships and Maſters Names, *&c.*

Alſo the ſame Accompt Dr. To Caſh paid for Cuſtom, and other Charges.

Then make Wares ſhipp'd Cr. By the Employer, his Accompt-currant for the Value.

And Caſh Cr. By the ſame Accompt currant, for the Charges of ſhipping off.

Note. That if theſe Goods ſhipp'd were bought by Order, and on the Accompt of the Employer with Ready-money, and not entred before in your Ledger. Make

Make [your Employer (naming his Name) his Accompt Currant Dr.] To Cash for the Value of the Goods, and Charges of shipping off.
And Cash Creditor *per Contra.*

Case 6. When a Bill of Exchange is drawn on a Factor by his Employer, payable at time.

Rule. Make [Employer at such a place (as before) his Accompt Currant] Dr. To him to whom the Bill is payable for the Content thereof.
Then make [him Cr. To whom the Bill is payable] (naming his Name) By your Employer his Accompt Currant for the same Summ.

Note. That if this Bill had been paid to order of the Employer by the Factor presently; the Employer's Accompt Currant must be made Dr. to Cash for the Summ paid (naming to whom) And Cash Cr. by the contrary for *Ditto* Summ.
And the Entry is the same with this last, when the Factor remits Ready-money to his Employer.

§. 5. *Factorage Accompts in Foreign Trade.*

Definit. THESE Accompts are when a Factor cannot carry on the Business of those whom he serves in Commission without Assistance of Foreign Correspondence, of whose Returns he is Accomptable to his Employer.

Case 1. When Goods sent to Sea are Insured by me.

Rule. Make [Voyage to such a place, for such a one's Accompt (the Employer Consigned to such a Factor Dr.] To Cash (if you paid the Insurance-money presently) and Cash Cr. By Voyage, *&c.*
But if the Insurance-money was not to be paid presently: Then [Voyage To, *&c.*] Dr. To the Insuror.
And the Insuror Cr. By Voyage.

Case 2. When Goods are shipp'd by a Factor by Order of his Employer to his Factor in another Country.

Rule. Make [Voyage to such a place for Accompt of your Employer Consinged to your Factor (naming his Name) Dr.] To [my Employer his Accompt of Wares] for Charges at the Receipt of the Goods:
And To Cash for Charges of shipping.

Then,

Then make [*per contra* Cr. the Accompt of Wares, and Cash.

Case 3. When you receive Advice that the Wares are sold, which were formerly sent to your Factor.

Rule. Make [Factor at such a place for Accompt of my Employer] Dr. To Voyage to such a place, for *Ditto* Accompt for the Nett proceed as by Advice.

Then make [Voyage to the same place for Accompt of my Employer] Cr. By Factor at — for Accompt of my Employer.

Case 4. When you are to enter your Provision for Wares sold on a Foreign Accompt.

Rule. Make [Voyage to such a place (where your Factor resideth) for Accompt of my Employer] Dr. To Profit and Loss, for so much as your Provision (or Money for your Employment) amounteth to, as by your Agreement.

Then make [Profit and Loss Cr.] By Voyage to —— for Accompt of my Employer for the same Summ.

Case 5. When you receive Advice that your Factor hath made Abatement for Defects in Goods that he formerly sold.

Rule. Make [Voyage to such a place for Accompt of my Employer] Dr. To Factor at such a place for Accompt of your Employer, so much as abated.

Then make [Factor (at such a place) for Accompt of my Employer (at such a place Cr.) By Voyage (to the place your Factor liveth at) for Accompt of my Employer for the same Summ.

Note, that when you close the Accompt of Wares sold by your Factor with his Returns, *&c.* for Accompt of your Employer, you must make Voyage to your Factor, for Accompt of your Employer Dr. [To your Employer's Accompt Currant] for the Balance thereof. And the contrary Cr. By Voyage to such a place for Accompt of your Employer, for the same Summ.

§. 6. *Company Accompts.*

Definit. COmpany Accompts is, when a Stock is employed in Common between several Merchants in the Way of Trade, and each Partner is to have a Share of the Gain, or bear a Share in the Loss, in Proportion to his Share in the Stock, as is taught in the Rules of Fellowship in the last Chapter.

Case 1.

Caſe 1. When Goods are bought and paid for by my ſelf, for Company Accompt.

Rule. Make [Wares in Company between my Partner and Me (naming our ſeveral Shares of the Stock) Debtor] To Caſh for the Value of the Goods, *&c.*

[Caſh Cr.] By Wares in Company between Partner and Me for the ſame Summ.

Then make [my Partner (naming his Name) his Accompt Currant] Dr. To *Ditto* Partner's Accompt by me in Company for his Share of the Stock.

And his Accompt by me in Company Cr. By his Accompt Currant for the ſame Summ.

Note, that if the Goods were bought upon truſt, the Entry is the ſame; if inſtead of [Caſh] you make the Goods Dr. To, the [Seller] and him Cr. by the ſame.

Caſe 2. When I receive my Partner's Share of Caſh for the Goods bought in Company.

Rule. [Caſh Dr.] To my Partner his Accompt Currant for the Summ he paid me.

[His Accompt Currant] Cr. by Caſh for the ſame Summ.

Caſe 3. When (you having the management of the Accompt in Company) give an Aſſignment to a Cr. upon your Partner, for his Share of Goods bought in Company.

Rule. Make [the Receiver Dr.] To [your Partner his Accompt Currant] for the Summ in the Aſſignment.

And Partner's Accompt Currant Cr. by the Demander for the ſame Summ———

Caſe 4. When I receive Ready-money for Goods ſold in Company.

Rule. Make [Caſh Dr.] To Wares ſold in Company (always naming the Wares) between my Partner and Me (naming his Name and each of our Shares) for ſuch Goods ſold ſuch a Perſon, ſo much as their Value.

And [Wares in Company between ſuch a one, and me] Cr. By Caſh for the ſame Summ.

Then make [Partner's Accompt by me in Company] Dr. To his Accompt Currant for his Share of the Caſh receiv'd.

And [Partner's Accompt Currant Cr. By his Accompt by me in Company for the ſame Summ.

Note, if theſe Wares had been ſold at time, the Entry is the ſame, inſtead of making Caſh Dr. To Wares in Company;

pany; you make the Buyer Dr. To the ſame Wares: And [Wares in Company Cr. by the Buyers, *&c.*]

Caſe 5. When Goods are ſold in Company, part for Ready-money and part at time.

Rule. Make Caſh Dr. To Wares in Company, between my Partner and me, for the Money received in part.

And the Buyer Dr. To the ſame Accompt for the Money left unpaid: Then make Wares in Company between my Partner and me, Cr. By ſundry Accompts (referring To the Folio's of Caſh) and the Buyer's Accompt for the whole Value of the Goods ſold.

2*dly*, Make [my Partner's Accompt by me in Company] Dr. To his Accompt Currant, for his Share of the whole Value of the Wares ſold.

And my Partner's Accompt Currant Cr. By his Accompt by me in Company for the ſame Summ.

Caſe 6. When I bring into Company Wares of my own, that are enter'd in my Ledger.

Rule. Make Wares in Company (naming their Names) between my Partner and me] Dr. To Wares (naming their Name again) in the Summ you bring them into Company for, naming for what Quantity, Price, *&c.*

Then make [Wares (as before, entred in your Ledger (Cr.] By the ſame Wares in Company between my Partner and me, for the Quantity brought into Company at ſuch a price.

2*dly*, Make [Partner his Accompt By me in Company Dr.] To my Partner's Accompt Currant for ſo much Goods brought into Company by me, of which his ſhare of the Price is ſo much.

Then make [Partner his Accompt Currant Cr.] By his Accompt by me in Company for his ſaid Share ——

Caſe 7. When Wares bought for Company Accompt and Booked, are ſhipp'd off To be ſold for the ſame Company Accompt.

Rule. Make [Voyage (to the place whither the Ship is bound, and Factor the Wares are conſign'd to) in Company between my Partner and me] Dr. To Goods ſhipp'd for their Value, To Caſh for Charge of Shipping, ſo much as paid for that.

Then make [Wares in Company between my Partner and me] Cr. By [Voyage in Company between us] for their value. And [Caſh Cr.] By Charges of Shipping.

2*dly*,

2dly, Make [my Partner his Accompt Currant Dr. To his Accompt by me in Company for his ſhare of the Charge of ſhipping off. And

Ditto [Partner his Accompt in Company] Cr. By his Accompt currant for the ſame Summ ——

Caſe 8. When Wares are bought on Company Accompt to be paid for at Time, And are ſhipp'd off (and Charges paid) before Entry.

Rule. Make [Voyage to ſuch a place) in Company between my Partner and Me, conſigned to our Factor] Dr. To the Selling-man for the Value of the Wares, and To Caſh for the Charges of ſhipping, *&c.*

Then make [the Seller Cr.] By Voyage to ſuch a place, in Company between my Partner and me, conſigned to our Factor, for the Value of the Goods ſhipp'd. And

[Caſh Cr.] By Voyage in Company between my Partner and Me, conſigned to our Factor at ſuch a place, for the Charge till on Board.

2dly, Make [Partner his Accompt Currant] Dr. To *Ditto* Partner's Accompt in Company, for his ſhare of the Value of the Wares, and Charges till on Board.

And [his Accompt in Company] Cr. By his Accompt currant for the ſame ſhare of the Value and Charges of ſhipping.

Note, That if the Wares bought in this Caſe had been paid for in Ready-money, the Entry would be the ſame, with this Difference onely; That whereas firſt, Voyage in Company, *&c.* is made Dr. To the Seller, and he Cr. by Voyage, *&c.* you muſt make [Voyage in Company, *&c.*] Dr. To Caſh for the Value and Charges, And Caſh Cr. By Voyage, *&c.* for the ſame Summ.

Caſe 9. When I receive Advice that Wares for Company Accompt are ſold by our Factor.

Rule. [Factor at ſuch a place, for Company Accompt between my Partner (ſo much of the Stock) and (ſo much) me, our Accompt currant Dr.] To Voyage to ſuch a place in Company between my Partner and me (naming our Shares) conſigned to *Ditto* Factor for the Nett proceed as by Advice. And

[Voyage to such a place in Company between my Partner and me (naming our Shares of the Stock) consigned to such a Factor] Cr. By Factor at such a place for Company Accompt between my Partner and me, our Accompt currant for the said Nett proceed.

Case 10. When I receive Advice that our Factor hath made Abatement for Defect in Goods sold (between my Partner and Me) in Company.

Rule. Make [Voyage to ——— in Company between my Partner and Me (naming our Shares always after the same) consigned to ——— (Factor) Dr.]

To *Ditto* Factor for Company Accompt between my Partner and Me, for the Abatement for the Defect.

Then [Factor at such a place for Company Accompt between my Partner and Me, our Accompt currant] Cr. By Voyage to ——— in Company between my Partner and me, for the same Summ abated.

Case 11. When Money is remitted to me by our Factor, for Wares sold, for Accompt of Company, and by me received.

Rule. Make [Cash Dr.] To Factor at ——— for Company Accompt between my Partner and me, our Accompt currant, for the Money receiv'd by Bill, and

Factor at ——— for Company Accompt between my Partner and me, our Accompt currant] Cr. By Cash for the same Summ ———

Then make [my Partner's Accompt in Company Dr.] To *Ditto* Partner's Accompt currant, for his share in the Money receiv'd. And

[My Partner's Accompt currant Cr.] By Partner's Accompt in Company for the same Summ.

Note, That if this Money had been payable by Bill at single or double Usance, *&c.* the Entry would differ little, only instead of making [Cash Dr. To Factor, *&c.*] make his Accompt that accepteth the Bill, Dr. To Factor at ——— *&c.* and *per contra* Cr.

Case 12. When I receive Wares from our Factor, in return for Wares sold by him for Company Accompt, and pay Charges for Freight, Custom, *&c.* at Receipt thereof.

Rule. Make [Wares received] Dr. To Factor at ——— for Company Accompt between my Partner and Me, our Accompt currant

current for the Value of the Goods and Charges till on Board, as *per* Advice to much.

And Factor at ——— for Company Accompt between, *&c.* our Accompt current] Cr. By Wares received for the same Summ ———

Then make [Wares received] Dr. To Cash for the Summ paid at the Receipt for Custom, *&c.*

And Cash Cr. By Wares received for the same Summ.

Then to place the Accompt between my Partner and Me.

Make [my Partner's Accompt in Company] Dr. To his Accompt current for his Share, as *per* Invoyce of the return.

And [my Partner's Accompt current] Cr. By his Accompt by me in Company for the same Summ.

Case 13. When I receive Advice that my Factor has shipp'd off, and consigned Wares to our Factor in another Country, for Company Accompt.

Rule. Make [Voyage to ——— consigned to our Factor for Company Accompt between my Partner and Me] Dr. To Factor at ——— (*Viz.* my Factor that shipp'd the Goods) my Accompt current for their Value and Charges, as *per* Advice of my Factor.

And my Factor (that shipp'd the Goods) at ——— my Accompt current Cr. By Voyage to ——— (*Viz.* the place our Factor resideth at) consigned to our Factor, in Company between my Partner and Me, for the same Summ.

Then make [my Partner's Accompt current] Dr. To his Accompt in Company, for his Share of the Value and Charges. And

[My Partner's Accompt in Company Cr.] By his Accompt current for the same Summ

Case 14. When Wares are returned by our Factor, to my Factor in another Country, for Wares sold for Company, Accompt by our said Factor.

Rule. [Voyage to such a place consigned to my Factor] Dr. To (our) Factor at ——— for Accompt of Company between my Partner and Me, our Accompt current, for the Value of the Goods shipp'd. And

(our) Factor at ——— for Accompt of Company, between my Partner and Me our Accompt current] Cr. By Voyage

(to

(to such a place) consigned to [my] Factor for the said Value and Charges.

Then make [my Partner's Accompt in Company] Dr. To his Accompt current for his and Proportion as per Advice received of the Accompt.

His Accompt current Cr. By his Accompt in Company, for the same Summ.

Case 15. Rule. When my Partner draws a Bill upon me payable at sight.

Make [Partner (turning his Name) his Accompt Current] Dr. To Cash for the Contents of the Bill paid. And Cash Cr. By [my Partner's Accompt Current] for the same Summ.

Case 16 Rule. When you close an Accompt in Company, observe this.

Make [Wares (*&c.*) in Company between me and Partner] (naming his Share of the Stock, and so much me) Dr. To sundry Accompts, for closing the Accompt, *viz.*

[To Profit and Loss] for my Share of the Gain by Trading.

[To *Ditto*] for any Provision (or Employment) at so much *per Cent.* as by agreement. And

[Profit and Loss] Cr. By the Summ your Provision and Share of the Gain amounts to.

Then Wares, *&c.* in Company (as before) Dr. To my Partner's Accompt current for his Share of the Gain. And [His Accompt current Cr.] By Wares in Company, *&c.* for the same Summ.

Company Accompts are generally esteemed very difficult: But if a Person has a good Understanding in proper Accompts, and Factorage, he will find this very easie, there being little difference more than this,

1. In the Title of an Accompt in Company, To take in your Partner's Name in Company mentioning his and your Share of the Stock, *&c.*

2. After any thing is bought, sold, shipp'd off, received, *&c.* and booked as in a proper or Factorage Accompt (having respect to the Title of Company Accompt aforesaid) you must take Care to make your Partner or Partners Accompt current Dr. To or Cr. By his Accompt in Company, which you will easily know how to do by the 16 Cases foregoing.

§ 7. The

§. 7. *The Method of keeping the Waſte-book, Journal and Ledger.*

THE Waſte-Book of me *C. D.* of *London*, Merchant: Containing all my Dealings from the Firſt Day of *July*, 1694:

In the Name of God. Amen.

An Inventory taken *July* the firſt, containing all my Eſtate in Caſh, Wares, and Debts, which I have at this Day. And alſo what Debts are owing by me to others, *&c.*

	li.	s.	d.
My whole Eſtate this day in Money, Wares and Debts is ——— 3159 *li.* 10 *s.*			
(*Viz.*) li. s. d.			
Imprimis. I have in ready Caſh ——— 1540:00:00			
Item. I have Druggs, *viz.* li. s. d.			
340 *l.* of Scammony at 10 *s. per l.* — 170:00:0			
565 *l* of Opium at 6 *s. per l.* ——— 169:10:0			
105 C. Gallingale at 40 *s. per C.* — 210:00:0			
——— 549:10:00			
Item. I have Raw Silk, *viz.*			
440 *l.* of *Tripoli* Belladine at 16 *s. per lb.* ——— 352:00:0			
650 *l.* Legee of *Smirna* at 12 *s. per* ℔ ——— 390:00:0			
1090 ℔ at ——— 742:00:00			
Item. I have at *Aleppo*, conſigned to *Gilbert Gainwell* my Factor there, theſe *Norwich* Wares remaining unſold, *viz.*			
18 Ser. Denims which coſt 6 *l.* each, 108:00:0			
30 Grograms at 3 *l. per* piece ——— 90:00:0			
40 Barateens at 3 *l.* 5 *s.* each ——— 130:00:0			
88 pieces in all, which coſt ——— 328:00:00			
———	3159	10	00
Item. I am indebted to ſeveral perſons, *viz.*			
To *William Richards* due the 3d Inſtant,	150.00:00		
To *Richard Nicholſon* to Ballance his Accompt in my old *Ledger* ———	80:00:00		
To *Charles Rolling* due the 30th. Inſtant—	140:00:00		
To *Simon Thuynemans* due *Aug.* 3d. ———	140:00:00		
———	510	00	00

(*The Method of the Entries in the Waſte-book.*)

July 2. 1694.

Sold *George Higgs* 300 *l.* of Scammony for ready money at 20 *s.* 6 *d. per* lb — li. 307 s. 10 d. 00

Ditto 10.

Bought of *Richard Nicholſon* the *Norwich* Wares following, *viz.*

	l.	*s.*	*d.*
10 Grograms at 3 *l. per* Piece	30	00	00
24 Barateens at at 3 *l.* 6 *s. per* Piece	79	04	00
34 Pieces in all, amounting to	109	04	00

Of which I have paid 80 *l.* ready money,
And the reſt, which is 29 *l.* 4 *s.* to be paid in 8 days.

Ditto 15.

Received Advice from *Richard Gainwell*, my Factor at *Aleppo*, that he hath ſold to ſundry perſons for my Accompt 60 Pieces of *Norwich* Wares; the Nett proceed of which, as by the particulars in his Accompt on the File, is 1500 Dollars, the Exchange at 4 *s.* 6 *d. per* Dollar, makes Sterling — 337 10 00

Lent *George Higgs* the Summ of 500 *l.* for 3 Months, for which he is to pay me Intereſt at the rate of 8 *l. per Cent per Annum.*

So that the money lent (as entred in the Caſh-book) is — 500

And the Intereſt thereof comes to — 10

Ditto 19.

Sold *William Short* the following Druggs, *viz.*

	l.	*s.*	*d.*
40 *l.* of Scammony at 21 *s. per l.*	42	00	00
350 *l.* of Opium at 12 *s. per l.*	210	00	00
390 *l.* in all for	252		

of which I have received 160 *l.* and the reſt, which is 92 *l.* to be paid the 30th. Inſtant.

(*The*

(*The Method of the Entries in the Waſte-book.*)

	l.	*s.*	*d.*
July 20. 1694:			
Received from my Factor *Gilbert Gainwell* at *Aleppo*, by my Order, and on my proper Accompt 8 Cheſts of Myrrh, containing 30 C. Nett, which at 22 Dollars *per C.* comes to 660 Dollars, the Exchange at 54 pence *per* Dollar makes Sterling	148	10	00
Richard Nicholſon hath aſſigned the 80 *l.* due to him from me, for the Ballance of his Accompt in my old Ledger to *James Silver*, which I have paid to *Ditto Silver* on demand	80	00	00
Ditto 25.			
Gilbert Gainwell Factor at *Aleppo*, hath remitted to me 600 Dollars payable here at Double Uſance, by *Matthew Creſſold*, for the Value delivered there to *Mahoat Fanezwar* the firſt of *April* laſt, the Exchange at 4 *s.* 8 *d.* *per* Dollar, makes Sterling	140	00	00
Which Bill is accepted.			
Ditto 30.			
Sold Alderman *Ryley* Mercer, the following *Norwich* Wares, *viz.*	*li.*	*s.*	*d.*
10 Grograms at 3 *l.* 10 *s.* *per* Piece	35	00	00
24 Barateens at 4 *l.* 4 *s.* *per* Piece	100	16	00
34 Pieces at	135	16	00
For which he hath given me an Aſſignment on *Peter Paygood*, to be paid me in 8 days, which I have accepted.			
Sold *Simon Strutt* the following Raw Silk for ready money, *viz.*	*li.*	*s.*	*d.*
350 *l.* of *Tripoli* Belladine at 30 *s.* *per* ℔	525	00	00
650 *l.* *Legee* at 25 *s.* *per* ℔	812	10	00
1000 *l.* in all, at	1337	10	00

(The Entry of the Inventory in the Journal.)

THE JOURNAL of me *C. D.* of *London*, Merchant: Containing all my Dealings from the First Day of *July*, 1694.

In the Name of God. Amen.

An Inventory taken the first of *July*, 1694. of my present Estate in Money, Wares, and Debts, this day owing to me, and what Debts are owing by me, *&c.*

Fol. Ledger		li.	s.	d.
	Sundry Accompts are Debtor to Stock in the Summ of 3159 *l.* 10 *s.* for so much Cash, Wares and Debts owing to me this day, *viz.*			
1	Cash for so much in Chest	1540	00	00
1	Druggs, *viz.*			
2	340 *l.* of Scammony at 10 *s. per l.*	170	00	0
1	565 *l* Opium at 6 *s. per l.*	169	10	0
	105 *C.* Gallingale at 40 *s. per C.*	210	00	0
3		549	10	00
1	Raw Silk for 1090 *lb*, *viz.*			
	440 *l.* of *Tripoli* Belladine at 16 *s. per l.*	352	00	0
	650 *l.* Legee of *Smirna* at 12 *s. per lb*	390	00	0
		742	00	00
1	Voyage to *Aleppo*, consigned to *Gilbert Gainwell* my Factor there, for *Norwich* Wares remaining unsold, *viz.*			
	18 Ser. Denims that cost 6 *l.* each,	108	00	0
	30 Grograms at 3 *l. per* piece	90	00	0
	40 Barateens at 3 *l.* 5 *s.* each	130	00	0
	88 pieces in all, which amounts to	328	00	00
		3159	10	00
	Stock is Debtor to sundry Accompts 510 *l.* Due to sundry persons, *viz.*			
3	To *Will. Richards* due the 3d Instant	150	00	00
2	To *Richard Nicholson* for the Foot of his old Accompt	80	00	00
3	To *Charles Rolling* due the 30th Instant,	140	00	00
4	To *Simon Thuynemans* due *Aug.* 3d. next,	140	00	00
		510	00	00

The End of the Inventory.

(*The*

(*The Method of Journal Entries.*)

		li.	s.	d.
	July 20. 1694.			
1	Cash Debtor to Druggs for 300 *l.* of Scammony sold			
2	*George Higgs* for ready money at 20 *s.* 6 *d. per* ℔. —	307	10	00
	Ditto 10.			
1	*Norwich* Wares Debtor to sundry Accompts 109 *l.* 4 *s.* for 34 Pieces bought of *Rich. Nicholson*, viz.			
	l. s. d.			
	10 Grograms at 3 *l. per* piece —— 30:00:00			
	24 Barateens at 3 *l.* 6 *s.* each —— 79:04:00			
		109	04	00
1	To Cash paid *Ditto Nicholson* in part —— 80:00:00			
2	To *Ditto Nicholson*, to pay him the 25th Instant —— 29:04:00			
	Ditto 15.			
1	*Gilbert Gainwell* at *Aleppo* my Accompt Currant, Debtor to Voyage to *Aleppo*, consign'd to *Ditto Gainwell* the Summ of 337 *l.* 10 *s.* for the Nett proceed of Wares sold, as *per* his Accompt for 1500 Dollars, the Exchange at 54 pence Sterling *per* Dollar, makes English Coin ——	337	10	00
3	*George Higgs* Debtor to sundry Accompts the Summ of 510 *l.* for 500 *l.* lent him at Intereſt for 3 Months, at 8 *l. per Cent. per Annum.* viz. *l. s. d.*			
1	To Cash for the Principal lent —— 500:00:00			
3	To Profit and Loss for the Intereſt —— 10:00:00			
		510	00	00
	Ditto 19.			
	Sundry Accompts Debtor to Druggs the Summ of 252 *l.* for 390 ℔ sold *W. Short* as followeth, *li. s. d.*			
2	40 *l.* of Scammony at 21 *s. per* ℔. —— 42:00:00			
	350 *l.* of Opium at 12 *s. per* ℔. —— 210:00:00			
	(*viz.*)	252	00	00
1	Cash for 160 *l.* receiv'd in part of *Ditto Short.* (and)			
2	*Ditto Short* Debtor 92 *l.* he is to pay me the 30th Inst.			

(*The Method of Journal Entries.*)

July 20. 1694.

2/1 Druggs Debtor to *Gilbert Gainwell* at *Aleppo* my Accompt Currant, 1481. 10*s* 00*d*. for 8 Cheſts of Myrrh, poize Nett 30 *C*. at 22 Dollars *per C*. makes 660 Dollars, the Exchange at 54 pence *per* Dollar, is Sterling — *li.* 148 10 00

2/1 *Richard Nicholſon* Debtor to Caſh the Summ of 80 *l*. being the Ballance of an Accompt due to him, which I have paid *James Silver* by Aſſignation of *Ditto Nicholſon* — 80 00 00

Ditto 25.

2/1 *Matthew Cleſſold* Dr. to *Gilbert Gainwell* at *Aleppo*, my Accompt Currant 600 Dollars by Bill remitted to me by *Ditto Gainwell* payable at Double Uſance for the Value delivered there, to *Mahoat Janezwar*, the Exchange at 4 *s*. 8 *d*. *per* Dollar, is in *Engliſh* Coin — 140 00 00

Ditto 30.

2/1 *Peter Paygood* Debtor to *Norwich* Wares the Summ of 135 *l*. 16 *s*. for 34 pieces ſold Alderman *Ryley*, *viz*.

	li.	*s.*	*d.*
10 Grograms at 3 *l*. 10 *s*. *per* piece —	35	00	00
24 Barateens at 4 *l*. 4 *s*. *per* piece —	100	16	00
	135	16	00

For which Summ *Ditto Paygood* hath given me his Bill to pay in 8 days by Aſſignation of *Ditto Ryley* —

1/3 Caſh Debtor to Raw Silk 1337 *l*. 10 *s*. for 1000 ℔ ſold to *Simon Strutt* for ready money, *viz*.

	li.	*s.*	*d.*
350 ℔ of *Tripoly*-Bellad. at 30 *s*. *per* lb.	525	00	00
650 *Legee* at 25 *s*. *per* lb. —	812	10	00
1000 *l*. at —	1337	10	00

Here ends the Journal.

(*The*

(*The Form of the Book of Houſhold Expences.*)

1694		*Houſhold Expences, Debtor.*	*li.*	*s.*	*d.*
July	3	To Caſh paid *Daniel Dunmuch* for 1 Quarters Rent of my dwelling-Houſe, due at *Midſummer*-day laſt, in full	40	10	
	4	To Caſh for my Pocket-Expences	4		
	15	To Caſh paid my Wife for Apparel, *&c.*	50	14	
	30	To Caſh paid *Su. Savenone*, the Houſekeeper, for this Month	50	4	6
	31	To Caſh for my Pocket-Expences	4		
		Carry'd to Caſh-book, fol. 1	149	8	6
		(*See how this is poſted into the Caſh-book, Cr. ſide.*)			

(*The Form of the Book of Charges of Merchandize.*)

1694		*Charges of Merchandize, Debtor.*	*li.*	*s.*	*d.*
July	1	To Caſh paid *Lawrence Lovemoney* for a Quarters Rent of my Warehouſe, due at *Midſummer*-day laſt, and is in full	10		
	3	To Caſh paid for Poſt-Letters		10	
	10	To Caſh paid for *Ditto*		12	4
	20	To Caſh paid Freight of 8 Cheſts of Myrrh	10		
		To Caſh paid Cuſtom of *Ditto* Myrrh	70	14	
	21	To Caſh paid Wharfage, Crainage, *&c.* of *Ditto*, at 5 *d. per* Cheſt		3	4
		To Caſh paid Cartage of *Ditto* from the Key		6	
	31	To Caſh paid Porterage this Month		6	3
		To Caſh paid Demorage		4	
		Entred in Caſh-book, fol. 1	92	15	11
		(*See how this Months Charges of Merchandize is poſted into the Caſh-book, Cr. ſide.*)			

(*The*

(*The Form of the Caſh-Book.*)

London, Anno Domini, 1694.

1694		*Caſh Debtor.*	*li.*	*s.*	*d.*
July.	2	To Druggs, for 300 ℔ of Scammony ſold *George Higgs*	307	10	
	19	To *Ditto* receiv'd of *W. Short* in part	160		
	30	To Raw Silk, receiv'd of *Simon Strutt*	1337	10	
	31	To *William Short*, receiv'd in full	92		
		Carried to fol. 1. in the Ledger	1897		

See how this Month's Accompt of Caſh received, is poſted into the Accompt of Caſh in in the Ledger, Fol. (1.) *Dr. ſide.*

(*The Form of the Cash-Book.*)

London, Anno Domini, 1694.

1694		*Per Contra Creditor.*	*li.*	*s.*	*d.*
July	3	By *W. Richards*, paid him in full	150		
	10	By *Norwich* Wares, paid *R. Nicholſon* in part	80		
	15	By *G. Higgs*, lent him at Intereſt for 3 Mon.	500		
	20	By *R. Nicholſon*, paid *James Silver* by Aſſignation	80		
	25	By *Ditto Nicholſon*, paid him in full	29	4	
	30	By *Charles Rolling*, paid him in full	140		
		By *Simon Thuynemans*, paid him in part	30		
	31	By Houſhold Expences this Month, from fol. 1.	149	8	6
		By Charges of Merchandize this Month, as on fol. 1.	92	15	11
		Carried to Ledger, fol. 1.	1251	8	5

See how this Month's Accompt of Caſh paid is poſted into the Accompt of Caſh in the Ledger, Creditor-ſide, fol. (1.)

(*The Method of Ledger Entries.*)

London, Anno Domini, 1694.

1694		*Stock Debtor.*	Fo.	*li.*	*s.*	*d.*
July	1	To ſundry Accompts, as *per* Inventory	—	510		
		To Ballance	4	3546		01
				4056		01

1694		*Caſh Debtor.*				
July	1	To Stock, then in Cheſt	1	1540		
	31	To ſundry Accompts as *per* Caſh-book, fol. 1.	—	1897		
				3437		

1694		*Norwich* Wares, *Debtor.* pg. 34				
July	10	To ſundry Accompts for	1,2	109	04	
		To Profit and Loſs gained by this Accompt	3	26	12	
				135	16	

1694		*Voyage to Aleppo conſign'd to G. Gainwell Dr.*				
July	1	To Stock for Wares unſold	1	328		
		To Profit and Loſs gain'd by this Accompt	3	50	02	06
				478	02	06

1649		G. Gainwell *my Accompt Currant, Dr.*				
July	15	To Voyage to *Aleppo* conſign'd to *Ditto Gainwell*	1	337	10	

(*The Method of the Ledger Entries.*)

London, Anno Domini, 1694.

1694		*Per Contra Creditor.*	Fo.	*li.*	*s.*	*d.*
July	1	By ſundry Accompts, as *per* Inventory	—	3159	10	
		By Profit and Loſs gained by 1 Mo. Trade	3	896	10	01
				4056		01

1694		*Per Contra Creditor.*	Fo.	*li.*	*s.*	*d.*
July	31	By ſundry Accompts, as *per* Caſh-book, fol. 1	—	1251	08	05
		By Ballance reſteth Caſh	4	2185	11	07
				3437		

1694		*Per Contra Creditor.*	pd.	Fo.	*li.*	*s.*	*d.*
July	30	By *Peter Paygood* for	34	2	135	16	

1694		*Per Contra Creditor.*	Fo.	*li.*	*s.*	*d.*
July	15	By *Gilbert Gainwell* my Accompt Currant	1	337	10	
		By Ballance for Wares unſold	4	140	12	06
				478	02	06

1694		*Per Contra Creditor.*	Fo.	*li.*	*s.*	*d.*
July	20	By Druggs for 8 Cheſts of Myrrh	2	148	10	
	25	By *Matthew Cleſſold*	2	140		
		By Ballance due to me	4	49		
				337	10	

(*The Method of the Ledger Entries.*)

London, Anno Domini, 1694.

1694		William Short *Debtor.*	Fo.	*li.*	*s.*	*d.*
July	19	To Druggs, due the 30th Instant	2	92		

1694		*Druggs Debtor.*	Gallingale and Myrrh. C.	Opium and Scammony. lb.	Fo.	*li.*	*s.*	*d.*
July	1	To Stock	105	905	1	549	10	
	10	To *G. Gainwell* at *Aleppo*, my Accompt Currant	30		1	148	10	
		To Profit and Loss, gained				284	10	
						982	10	

1694		Richard Nicholson, *Debtor.*	Fo.	*li.*	*s.*	*d.*
July	20	To Cash paid *James Silver* by Assignation	1	80		
	25	To Cash paid him in full	1	29	04	
				109	4	

1694		Matthew Clessold, *Debtor.*	Fo.	*li.*	*s.*	*d.*
July	25	To *G. Gainwell* at *Aleppo* my Accompt Cur.	1	140		

1694		Peter Paygood, *Debtor.*	Fo.	*li.*	*s.*	*d.*
July	30	To *Norwich* Wares for 34 pieces	1	135	16	

(*The Method of the Ledger Entries.*)

London, Anno Domini, 1694.

1694		*Per Contra Creditor.*	Fo.	*li.*	*s.*	*d.*
July	31	By Cash receiv'd in full	1	92		

1694		*Per Contra Creditor.*	Gallingale and Myrrh. C.	Opium and Scammony. lb.	Fo.	*li.*	*s.*	*d.*
July	2	By Cash for Scammony		300	1	307	10	
	19	By sundry Accompts		390	1,2	252		
		By Ballance rests unsold, *viz.* 215 lb. of Opium at 6 *s.* 10 *s.* *per* C. and 30 C. of Myrrh at 4 *l.* 10 *s.* *per* C. which in all cost			4	423		
						982	10	

1694		*Per Contra Creditor.*	Fo.	*li.*	*s.*	*d.*
July	1	By Stock	1	80		
	10	By *Norwich* Wares, to pay the 25th Instant	1	29	4	
				109	04	

	Per Contra Creditor.	Fo.	*li.*	*s.*	*d.*
	By Ballance due to me	4	140		

	Per Contra Creditor.	Fo.	*li.*	*s.*	*d.*
	By Ballance due to me	4	135	16	

(*The Method of the Ledger Entries.*)

London, Anno Domini, 1694.

1694		George Higgs, *Debtor.*	Fo.	*li.*	*s.*	*d.*
July	15	To ſundry Accompts for Prin. and Int. —	1,3	510		
1694		*Profit and Loſs, Debtor.*				
July	31	To Houſhold Expences —	4	149	08	06
	31	To Charges of Merchandize —	4	92	15	11
		To Stock gain'd by 1 Month's Trade —	1	896	10	01
				1138	14	06
1694		Charles Rolling, *Debtor.*				
July	30	To Caſh paid him in full —	1	140		
1694		William Richards, *Debtor.*				
July	3	To Caſh paid him in full —	1	150		
1694		*Raw Silk, Debtor.* — lb				
July	1	To Stock — 1090	1	742		
		To Profit and Loſs gained by this Accompt.	3	667	10	
				1409	10	

(*The Method of the Ledger Entries.*)

London, Anno Domini, 1694.

			Fo	*li.*	*s.*	*d.*
		Per Contra Creditor.				
		By Ballance due to me	4	510		
1694		*Per Contra Creditor.*				
July	15	By *G. Higgs* for Int. of 500 *l.* due *Oct.* 15*th.*	3	10		
	31	By *Norwich* Wares gained thereby	1	26	12	
		By Voyage to *Aleppo*, gained thereby	1	150	02	06
		By Druggs gained thereby	2	284	10	
		By Raw Silk, gained thereby	3	667	10	
				1138	14	06
1694		*Per Contra Creditor.*				
July	1	By Stock	1	140		
1694		*Per Contra Creditor.*				
July	1	By Stock	1	150		
1694		*Per Contra Creditor*	lb			
July	30	By Cash	1000	1337	10	
	31	By Ballance then rests unsold of *Tripoli* Belladine	90	72		
				1409	10	

(*The Method of the Ledger Entries.*)

London, Anno Domini, 1694.

1694		*Houſhold Expences, Debtor.*	Fo.	*li.*	*s.*	*d.*
July.	31	To Caſh paid this Month	1	149	08	06
1694		*Charges of Merchandize, Debtor.*				
July	31	To Caſh paid this Month	1	92	15	11
1694		Simon Thuynemans, *Debtor.*				
July	30	To Caſh paid him in part	1	30		
	31	To Ballance due to him	4	110		
				140		
1694		*Ballance Debtor.*				
Aug.	1	To Caſh reſteth therein this day	1	2185	11	07
		To Voyage to *Aleppo* conſt. to *G. Gainwell*	1	140	12	6
		To *G. Gainwell* at *Aleppo*, my Ac. Currant	1	49		
		To Druggs reſts unſold, 215 ℔ of Opium at 6 *s. per* ℔. 105 *C.* of Gallingale at 40 *s.* and 30 *C.* of Myrrh at 4 *l.* 19 *s. per C.* which in all coſt	2	423		
		To *Matthew Cleſſold*, for his Bill	2	140		
		To *Peter Paygood*	2	135	16	
		To *G. Higgs* for Principal and Intereſt	3	510		
		To Raw Silk, for 90 ℔. of *Tripoli*-Bellad. reſting unſold, which coſt	3	72		
				3656		01

(*The Method of the Ledger Entries.*)

London, Anno Domini, 1694.

			Fo	*l.*	*s.*	*d.*
1694		*Per Contra Creditor.*				
July	31	By Profit and Loſs	3	149	08	06
1694		*Per Contra Creditor.*				
July	31	By Profit and Loſs	3	92	15	11
1694		*Per Contra Creditor.*				
July	1	By Stock	1	140		
1694		*Per Contra Creditor.*				
July	31	By *Simon Thuynemans* due *Aug.* 3.	4	110		
		By Stock	1	3546		01
				3656		01

Note, That the Transcript of the Debtor-side of the foregoing Ballance will be an Inventory of your present Estate in Cash, Wares, and Debts; and of Creditor-side (leaving out Stock) what you owe, by which you carry on a new Accompt.

Viz.

An Inventory taken *August* 1. 1694, of my present Estate in Cash, Wares, and Debts due to me; and also of what Debts are owing by me to others, *&c.* viz.

	l.	*s.*	*d.*
Imprimis, I have in ready Cash ——	2185:	11:	07
Item, I have at *Aleppo*, consigned to *G. Gainwell*, *Norwich* Wares remaining unsold, which cost ——	140:	12:	06
Item, *G. Gainwell* oweth me for Wares sold by him, and their Value not returned to me ——	49:	00:	00
Item, I have Drugs by me unsold, *viz.*			
Opium 215 lb at 6 *s.* *per* lb — 64:10:00			
Galling 105 *C.* at 40 *s.* *per C.* 210:00:00			
Myrrh 30 *C.* at 4 *l.* 19 *s.* *per C.* 148:10:00			
——	423:	00:	00
Item, *Matth. Clessold* oweth me upon Bill	140:	00:	00
Item, *P. Paygood* oweth me by Assignation	135:	16:	00
Item, *G. Higgs* oweth me upon Bond ——	510:	00:	00
Item, I have Raw Silk unsold, *viz.* 90 lb of *Tripoli* Belladine, at 16 *s.* *per* lb, cost ——	72:	00:	00
——	3656:	00:	01

On the contrary, the Debts I owe are as follows.

Viz.

To *Simon Thuynemans* due the 3*d.* Instant —— 110:00:00

To

To your Ledger you must have an Alphabet, for the ready finding every Accompt, whether Proper or Factorage, Domestick or Foreign, as of Men, Wares, Voyages, Profit and Loss, and Accompts Currant, *&c.* the Method whereof let be thus; (having a Page (or as there is occasion) for each Letter)

(*Viz.*)

C.

Cash ——— Fol. 1

Charges of Merchandize ——— 4

Matthew—Clessold ——— 2

D.

Drugs ——— 2

G.

Gilbert—Gainwell *my Accompt Currant*—1

H.

George—Higgs ——— 3

Houshold Expences ——— 4

N.

Norwich *Wares* ——— 1

Richard—Nicholson ——— 2

P.

Peter—Paygood ——— 2

Profit and Loss ——— 3

R.

Charles—Rollings ——— 3

William—Richards ——— 3

Raw Silk ——— 3

S.

Stock ——— 1

William—Short ——— 2

T.

Simon—Thuynemans ——— 4

V.

Voyage to Aleppo, *consigned to* Gilb. Gainwell—1

§. 8. *How to Post an Accompt.*

What Posting an Accompt is, is shewed in the Dictionary following, and in the Method I have here laid down for Book-keeping. Accompts are either posted,

1. Out of the Waste-Book into the Journal; or
2. Out of the Books of Houshold Expences and Charges of Merchandize into the Cash-Book; or,
3. And principally, out of the Journal and Cash-Book into the Ledger.

1. In Posting out of the Waste-Book into the Journal, you are to observe what is said in the Accompt given of the Journal, Chap. 10. to which I need add nothing, the Directions there, and Examples of the several parcels in the foregoing Journal posted out of the Waste-Book compared together, being sufficient to instruct the Learner how any Waste-Book-parcel is posted in the Journal.

2. Whatever is paid on accompt of House-keeping, *&c.* as is directed in the Accompt of the Book of Houshold Expences, Chap. 10. Or, on accompt of Charges of Merchandize, as you will find at the beginning of the said Chap. 10. must, when a Month (as *January*, *February*, &c.) is ended, be summ'd up, and entered on the Creditor-side of the Cash-Book, as you will see in the Examples of these Books foregoing, which will make it plain.

3. The chief and most considerable part of Posting is that of the Journal and Cash-Book into the Ledger, especially of the Journal; which, to make as plain as I can, take the following Example, by which you will know how to post all the rest.

Example.] The 10*th* Day of *July* 1694, I find in the Journal *Norwich* Wares Debtor to sundry Accompts, To post which into the Ledger I first turn to the Ledger, to see what folio is vacant, or has room on it, which I find the 1*st*; therefore I turn to the Alphabet, and on the folio Letter (N) I write [*Norwich* Wares, fol. 1] as you see in the annext Alphabet; and then in the Ledger on fol. 1, I enter in a fair large hand [*Norwich* Wares Debtor] in one Line, and under that, the Month and Day, Then [to sundry Accompts] which Accompts being Cash and *R. Nicholson*'s, the first entred on folio 1, the second on folio 2, I write fol. 1, 2 in the Line after [To sundry Accompts] as you see in the Example, and the same in the long Colume in the Journal. And then I consider, That if *Norwich*

wich Wares is Debtor to ſundry Accompts, fol. 1, 2, *viz.* To Caſh and *R. Nicholſon*, then it follows, that Caſh and *R. Nicholſon*'s Accompts muſt be Creditor By *Norwich* Wares; I therefore turn to *R. Nicholſon*'s Accompt, which having before found to be on fol. 2, I enter on the Creditor-ſide of his Accompt the Month and Day; then, [By *Norwich* Wares] ſo much as left due to him, referring to the folio on which *Norwich* Wares ſtands, *viz.* fol. 1, which write likewiſe in the Journal againſt *Norwich* Wares. Then I ſhould turn to Caſh in the Ledger, and make that Creditor by *Norwich* Wares; but that being done in the Caſh-Book, 'tis ſufficient if at the end of the Month I make Caſh Creditor in the Ledger By ſundry Accompts for all the Money paid that Month, referring to the folio in the Caſh-Book which that Summ is brought from: And likewiſe I make Caſh (in the Ledger) Debtor to ſundry Accompts for all the Money receiv'd that Month, as you ſee by the Caſh-Book and Accompt of Caſh in the Ledger foregoing. By this Example, and comparing the Entries in the ſeveral Books foregoing, you will eaſily know how to poſt any Accompt.

But note, That in all Accompts of Wares you muſt keep in a Colume next the left hand of the folio Culume the Pieces, Pounds, Yards, *&c.* bought of any Commodity, and likewiſe what is ſold; ſo will you eaſily ſee how much of any ſort of Goods remains unſold without telling or numbring the the ſame in the Ware-houſe; as in the Accompt of *Norwich* Wares, Drugs, aud Raw Silk foregoing.

And when you have thus poſted your Journal you muſt likewiſe poſt your Caſh-Book for that Month, or rather poſt both together, taking the days of the Month in due courſe; *i e.* Where Caſh is made Debtor to a Perſon for Money received, due formerly, and for which he is made Debtor in the Ledger; you muſt take care to give ſuch Perſon Credit for the Caſh paid, which Caſh being only entered in the Caſh-Book, you muſt therefore poſt from the Caſh-Book. And the like where Money is paid for any Debt, the Perſon to whom the Caſh is paid muſt be charged Debtor to Caſh; as you will ſee in the Caſh-Book foregoing; Money received from *William Short*, *William Short* has Credit for it. And on the Creditor-ſide of the Caſh-Book *Richard Nicholſon*, *Charles Rolling*, *William Richards*, *Simon Thuynemans*, Houſhold Expences, and Charges of Merchandize, are each made Debtor in their ſeveral Accompts in the Ledger, To Caſh paid, referring to the Accompt of Caſh in the Ledger, and in the

the Accompt of Cash in the Ledger, rrferring to the Folio of the Cash-book, not entering that Folio in the Colume of the Ledger Folio. For your farther Information (if any is needful) see the Cash-book and the Accompt given thereof at the beginning of this Chapter.

§. 9. *Directions for Closing an Accompt.*

What Closing an Accompt is, is shewed in the Dictionary; and all Accompts are closed either,

1. With Profit and Loss; or,
2. With Ballance; or,
3. With Profit, and Loss, and Ballance; or,
4. With Stock.

1. All Accompts of Goods or Wares; where all that was bought is sold, are closed with Profit and Loss, which is entered on the Debtor-side of the Accompt (if you gain thereby) or on the Creditor-side if you lose; of this the Accompt of *Norwich* Wares on fol. 1, is an Example.

2. All Accompts of Men are closed with Ballance on the Debtor-side if I owe to them, as the Accompt of *Simon Thuynemans*, folio 4; or on the Creditor-side if they are indebted to me, as the Accompt of *Matthew Clessold*, folio 2.

3. All Accompts of Wares, where all that are bought are not sold, are closed with Profit, and Loss, and Ballance, *i. e.* with Profit and Loss on the Debtor-side for the Summ gained by what is sold, and with Ballance on the Creditor-side for what the Goods remaining unsold cost; as in the Accompts of Drugs and Raw Silk.

4. No Accompts are closed with Stock, but Profit, and Loss, and Ballance; as in the Example following.

§. 10. *How to Ballance your Books.*

Having shewed how to Close any Accompt it will not be difficult to Ballance either a single Accompt or your whole Ledger, in order to know how much Cash, Wares, and Debts you have; what Debts you owe, and what you have gained by Trading since your last general Ballance.

1. To Ballance any single Accompt, summ up the Debtor and Creditor sides, and put their Totals on a piece of waste Paper, where take their difference, which is the Ballance, and must be entred on the

the Debtor or Creditor-ſide, as is taught in Cloſing an Accompt; which done, the Summ of the Debtor and Creditor-ſides ſhall be equal.

But note, That in an Accompt of Wares the ſaid Difference is Profit or Loſs, and muſt be entred on that ſide whoſe Summ is leaſt, to make the Summs of Dr. and Cr. ſides equal; as taught before.

But to Ballance your Ledger for the end above-mentioned.

Rule.] Take a Sheet of Paper, and on one ſide write [*Ballance Debtor*] as you ſee in the foregoing Accompt of Ballance; and on the other ſide write *Per Contra Creditor*, as the Sheet lies extended before you.

2. Cloſe and Ballance all your particular Accompts beginning with Caſh, (except Stock, and Profit, and Loſs, which having done throughout your Ledger,

3. Begin again at the Accompt of Caſh, and where an Accompt is cloſed with Ballance, enter the ſame on the contrary ſide of the Accompt of Ballance in your Paper, as in the Accompt of Caſh foregoing [*Caſh is Creditor*] by Ballance 2185 *l.* 11 *s.* 7 *d.* therefore Ballance (on your Paper) muſt be made Dr. to Caſh 2185 *l.* 11 *s.* 7 *d.* ſo in the Accompt of *Simon Thuynemans* he is made Dr. to Ballance, and therefore Ballance muſt be made Cr. by *Simon Thuynemans*.

Likewiſe where an Accompt is cloſed with Profit and Loſs enter the cloſing Summ on the contrary ſide of the Accompt of Profit and Loſs; as in the Accompt of *Norwich* Wares, which is cloſed Dr. to Profit and Loſs 26 *l.* 12 *s.* 00 *d.* therefore Profit and Loſs muſt be Creditor by *Norwich* Wares, as you ſee in the Accompt of Profit and Loſs.

And where you meet with an Accompt cloſed both with Profit and Loſs, and Ballance, as that of [Voyage to *Aleppo* conſigned to *G. Gainwell*] is, becauſe Ballance is on Cr. ſide, make Ballance on your Paper, Dr. to Voyage to *Aleppo*, &c. 140 *l.* 12 *s.* 6 *d.* And becauſe the ſaid Accompt of Voyage, *&c.* is Dr. to Profit and Loſs, make the Accompt of Profit and Loſs Creditor for the like Summ, *viz.* 150 *l.* 2 *s.* 6 *d.* And thus having guided you through the ſeveral Caſes that may happen, proceed with the reſt of the Accompts to the end of your Ledger, leaving Profit and Loſs uncloſed till you have cloſed and ballanced the reſt of the Accompts except Stock, as before taught; then

4. Cloſe the Accompt of Profit and Loſs with Debtor to or Creditor by Stock, and carry the foot to the contrary ſide of the Accompt

compt of Stock, as in the Example of the foregoing Accompt of Profit and Loſs cloſed with [Debtor to Stock 896 *l.* 10 *s.* 1*d.*] Stock muſt therefore be made Cr. by Profit and Loſs 896 *l.* 10 *s.* 1 *d.*

5. With the Difference of Dr. and Creditor-ſides of Ballance, *viz.* with Dr. To, or Cred. By Stock, cloſe the Accompt of Ballance, and carry the ſoot to the Accompt of Stock; as in the foregoing Accompt of Ballance, is cloſed Cred. by Stock 3546 *l.* 00 *s.* 01. therefore Stock muſt be Debtor to Ballance 3546 *l.* 00 *s.* 01 *d.*

6. *Laſtly*, Summ up the Dr. and Creditor ſides of the Accompt of Stock, and if they Ballance, or are alike, your Books have been kept right, otherwiſe you have committed ſome Error. For

(A General Rule for Ballance.)

Your preſent Stock and what you owed when you began the Accompt now ballanced, will be always equal to your Stock when you began your Accompts, and what you have gained ſince, to the Day the general Ballance is made. And the Reaſon of this is plain: For my former Stock and what I have gained ſince muſt be my preſent Stock; as in the Example foregoing of Stock, my former Neat Stock (Debts deducted) is 2649 *l.* 10 *s.* 00 *d.* and I have gained ſince, as appears by the Accompt of Profit and Loſs 896 *l.* 10 *s.* 01 *d.* the Summ of which is 3546 *l.* 00 *s.* 01 *d.*=my preſent Stock. But if (becauſe the method of the Accompt of Stock requires it) I add my Groſs Stock when I began Trade, to what I have ſince gained, the Summ will conſequently be juſt ſo much more than my preſent Neat Stock as was the Summ I owed when I began Trade; which if I therefore add to my preſent Stock the Summ muſt be equal to my former Groſs Stock and the Summ gained, as 'tis plain in the Example.

For if 3159 *l.* 10 *s.*—510 *l.* + 896:10:01 be = 3546:00:01;
Then it follows,
That 3159 *l.* 10 *s.* + 896:10:01, is—3546:00:01 + 510 *l.*

(*Note*, That (—) is leſs, (+) more, and (=) equal to.)

CHAP.

CHAP. XI.

Maxims for Young Merchants, containing the Customs and Practice of Merchants, with respect, 1. *To Bills of Exchange,* 2. *To Factors and Factorage. Laws for Brokers, Brokage,* &c.

§. 1. *Concerning Bills of Exchange:*

1. IN drawing a Bill the Drawer ought to respect, 1. The Place where and Time when the Bill is drawn, and in a Foreign Bill the Exchange agreed on. 2. The Time when the Content of the Bill is payable. 3. To whom. 4. The Summ to be paid. 5. The Exchange in words at length. 6. Of whom the Value is received. 7. To whose Accompt it is to be placed. 8. The Drawer's Name. 9. A Direction thereof to him on whom the Bill is drawn; as you will see in the Example following, Chap. 15.

2. Bills are either Foreign or Inland.

3. Inland Bills are such as are drawn and payable in the same Country which ought to be payable a certain time after Date.

4. A Bill drawn to pay at sight, is payable 3 days after the Accepter first seeth it.

5. Inland Bills were never used to be protested untill an Act made for that purpose 10 *W.* 3. Which Act contains as follows.

1. *That the Value must be mentioned to be received,* and not omitted as it is the Custome of most Drawers of Inland Bills.
2. *The Money must be payable, a certain number of Days, Weeks, or Months after Date;* not payable at sight or any time after.
3. *The Acceptance must be in the Acceptors hand-writing*; not a Verbal acceptance as most of your *London* Shopkeepers will only do.
4. *The Protest must not be made untill* 3 *days after the Bill is payable.*
5. *The Protest must be returned to the Drawer within* 14 *days after protest is made.*
6. *If not returned in that time, the person neglecting to pay all Cost, Damage and Interest.*
7. *If any Bill be lost within the time limited for payment the Drawer shall be obliged to give another Bill of the same Tenure with the first upon security to indempnifye him in case the Bill so lost shall be found again.*
8. *This Act extends not to Bills under* 5 *l.* no more than to such as are not accepted in writing, or those that do not mention the Value received, or are payable at sight.

6. Foreign Bills are ſuch as are drawn in one Country to be paid in another.

7. Foreign Bills are for the moſt part payable at ſingle, double or treble Uſance.

8. Uſance is the ſpace of Time between any day of one Month and the ſame Day of the next following, as from *January* the *4th* to *Feb. 4th*, *July* 4 to *Auguſt* 4, &c. when the place where the Bill is drawn and that where it is payable both compute their Time by one Stile, as both by Old or both by New; except at ſome Particular places, where through Cuſtom Uſance is ſometimes more than a Month.

9. There is likewiſe a cuſtomary Allowance of certain Days after the ſingle, double, *&c.* Uſance before a Bill is payable; and this is more in one Country than in another.

10. So that before it can be juſtly told when a Foreign Bill is due there are theſe things to be conſidered.

1. What Uſance is eſteemed with reſpect to ſeveral Countries.

2. What places reckon their time by old and what by new Stile.

3. What days are allowed for payment of a Bill in ſeveral Countries over and above their ſingle, double, *&c.* Uſance.

11. Uſance from *London* to and from *Middlebourg*, *Roterdam*, *Amſterdam*, *Antwerp*, *Bruges*, and other parts of the *Low-Countries* is 1 Month after the Date of the Bill, double Uſance 2 Months, *&c.*

Uſance from *Venice* or *Florence* to *London* is 3 Months.

Uſance from *Lisbon* to *London* and *Antwerp* is 2 Months.

Uſance from *Hamburgh* to *London* and *Contra* is 2 Months.

Uſance from *Antwerp* to *Rome* and *Venice* is 2 Months.

Uſance from *Genoa* to *Antwerp* is uſually 2 Months.

12. The Accompt of Time with reſpect to New and Old Stile are as follows.

Theſe Places reckon by New Stile.

Amſterdam, *Roterdam*, *Antwerp*, *Leyden*, *Harlem*, *Middleburg*, *Ghent*, *Bruſſels*, *Brabant* and moſt of the *Netherlands*: Alſo *Paris*, *Lyons*, *Marſeilles*, *Bordieux*, and all *France*; *Lisbon*, *O Porto*, *Cadiz*, *Bilboa*, and all the reſt of *Spain*. and *Portugal*; all *Italy* and *Venice*: Alſo in *Germany* all the Popiſh Electors and Princes, *Ausburg*, *Lints*, *Crembes*, *Wien*, *Dantzick* and all *Poland*.

Theſe places reckon by Old Stile, which is 10 days after the New. *England*, *Scotland*, and *Ireland*, all the Proteſtant Electors and Princes of *Germany*; *Copenhagen*, and all *Denmark*; *Embden*, the Proteſtant Cantons of *Switzerland*, *Hamburgh*, *Eaſt Friezland*, *Geneva*:

All

All *Sweden*, *Holstein*, *Lubeck*, *Strasburg*; all *Saxony*, *Riga* and *Leypsick*.

13. The time allowed in several places for the payment of Bills over and above the time mentioned in the Bills, is,

		Days	
At	*London*	3	is allowed, according to Custom, after the time in the Bill.
	Rotterdam	6	
	Paris	10	
	Roan	5	
	Hamburgh	12	
	Antwerp	14	

14. If a Bill is payable at Usance, it is payable 1 Month after the Date of the Bill. As if *A.* at *Amsterdam* drew a Bill on *L.* at *London*, payable at Usance dated *March* the 2*d.* here I consider that Usance is 1 Month, *i. e. April* the 2*d.* But because they reckon their time by New Style, or 10 days before us at *London*, therefore I take 10 days from *April* 2, and the remainder is *March* 23, to which add the 3 days of Grace according to the Custom of *London*, and the Summ is *March* the 26*th.* on which day. before the Sun goes down the Bill is due and payable by *L.*

15. A Merchant may deliberate 24 Hours before he needs to accept a Foreign Bill.

16. But if he refuseth after 24 Hours Consideration to accept that Bill, the person to whom the Bill is payable may protest it in the Office of a Publick Notary.

17. Protests are usually made (with relation to Foreign Bills) either

1. For Non-acceptance.
2. For better Security; or,
3. For Non-payment.

18. If the person on whom a Foreign Bill is drawn refuse to accept the same you must take a Publick Notary to be a Witness of the Refusal (which is Noting a Bill) and protest against him for Non acceptance; (the Form of a Protest you have in the Chapter following of Merchants Precedents:) This must be done, as must all other Protests, between Sun and Sun in the day time. And tho' the Merchant you protest against be not at home, the Protest is nevertheless valid if done by a sworn Publick Notary at the person's House or Lodging on whom the Bill is drawn.

19. Protests are made for better security when the Accepter of a Bill proves insolvent, or of bad repute.

20. After these Protests are drawn on a piece of paper under a

Copy of the Bill, and entered in the Publick Notaries Books, the ſaid Proteſt and Copy of the Bill are returned to him that paid the Value, but not the Bill it ſelf, unleſs afterwards by expreſs orders of him that paid the Value.

21. Upon the Receipt of a Proteſt of a Bill the perſon that paid the Value takes it and goes to the Drawer to whom the Value was paid, who muſt give better Security if the Proteſt was made therefore; or if it was made for Non-acceptance, the Drawer muſt either give better Advice to the perſon who formerly refuſed to accept the Bill, or elſe a new Bill on ſome other, together with Security for the payment of all Charges of Proteſt, *&c.*

22. If a Foreign Bill become due and is not paid, he to whom the Money is payable muſt proteſt for Non-payment, and return the Proteſt and a Copy of the Bill to the deliverer of the Value, as before, who muſt demand the Money of the Drawer to whom the Value was paid, and of the Security if the Bill had been formerly proteſted for Non-acceptance or better Security. But if the Bill was accepted but not paid, then he that paid the Value upon receipt of the Proteſt may oblige the perſon to whom the value was paid, to give good Security for the ſpeedy payment of the Principal Money, with all Charges, and upon refuſal may recover the ſame at Law.

23. The perſon to whom a Bill is payable muſt take care to demand it on the very day it becomes due.

24. The Charge of Noting and Proteſting Bills are as follows.

		s.	*d.*
For Noting a Bill	within the City	1	6
	without the City	2	6
For Proteſting a Bill	within the City	3	0
	without the City	5	0

25. If any one pay a Bill of Exchange (as is too frequent upon Rebate, *&c.*) before it be due, and he to whom the Money is ſo paid proves Inſolvent, before the time the Money is payable by the Bill, the Deliverer upon Advice of his Friends Inſolvency, Orders the Money to be paid to ſome other, which not being done, he will recover great Damages of the Drawer and Accepter of the Bill, if not the whole Content thereof.

26. If a Bill of Exchange be left for Acceptance, as is common, at the requeſt of the perſon on whom it is drawn, or his Servant; and if it be miſlaid or not to be found to return to the Preſenter in due time, when he ſhall demand the ſame, the perſon on whom it is drawn

ſhall

ſhall give him to whom it is payable his Note under his Hand and Seal to pay the Money according to the Bill; which if he refuſeth to do, the perſon to whom the Money is payable may proteſt for Non-acceptance and Non-payment, as tho' he had the Bill, otherwiſe the Cuſtom of leaving Bills for Acceptance would be diſſolved, and the courſe of Trade greatly obſtructed.

27. If an accepted Bill be loſt by him to whom it is payable, he muſt in the preſence of a Publick Notary ſignifie the ſame to the Acceptor, who when the Bill becomes payable ſhall pay the Money notwithſtanding the Bill is loſt, upon Bond or other Writing given to bear him harmleſs, or to be a ſufficient Voucher for the payment of the Bill. But if the Acceptor deny to do this, he to whom the Money is payable may proteſt when the Money is due for Non-payment, and recover the ſame by due courſe of Law.

28. There can be no revoking an accepted Bill, but the Acceptor is become abſolute Debtor to him to whom the Bill is payable for the Content thereof.

29. If the perſon to whom a Bill is payable die before it be due, there muſt be demand made however of the Money on the day it becometh due. And if upon offering good Security to ſave the Acceptor harmleſs from any Action, *&c.* of the Executors and Adminiſtrators of the Deceaſed he refuſe to pay, you muſt cauſe Proteſt to be made, as is common for Non-payment.

30. If the party that accepted a Bill die before it become due demand muſt be made of his Executors or Adminiſtrators on the day the Bill is payable, and if they refuſe to pay the Bill, Proteſt muſt be made for Non-payment as if the Acceptor were living and had refuſed to pay the ſame.

31. The Drawer of a bill ought at the ſame time to give his Correſpondent a Letter of Advice, That he has drawn a Bill upon him, at ſuch a time, for ſuch a Summ payable to ſuch a perſon, where he muſt inſert the Summ payable both in Words at length and Figures, with other things, as mentioned in Article the firſt foregoing.

32. No one ought to pay a Bill without a Letter of Advice, nor any Summ by Letter of Advice where a Bill is mentioned to be drawn, becauſe much Damage may enſue upon ſeveral accounts.

33. If the Summ in Words at length and Figures in a Bill of Exchange do not agree, it is ſafeſt to take that Summ which agrees with the Letter of Advice, whether it be that in Figures or Words at length, becauſe it cannot be ſuppoſed two miſtakes ſhould happen

juſt

juſt alike, in writing a Summ three times, tho' one miſtake may be very probable. But if the three Summs all differ in the Bill and Letter of Advice, the beſt way is to take that Summ for true which is in words at length in the Bill, tho' the ſafeſt way is to ſend with all ſpeed to the Drawer for freſh Advice. For if he on whom the Bill is drawn refuſe to accept it, there can no Proteſt be made becauſe the Summ is uncertain, tho' if the ſecond Bill be of the ſame Date with the firſt there will be no time loſt to the perſons to whom it is payable.

34. In drawing of Foreign Bills it is uſual and very proper to draw two or three of the ſame Tenor and Date, and to ſend them in ſo many ſeveral Letters of Advice, that in caſe one miſcarry the courſe of Exchange and Trade may not be retarded or interrupted thereby. And in this the Drawer muſt be ſure to take care, if he draws two Bills, to ſay in the 2d Bill, At ſuch a time pay this my 2d Bill of Exchange [my firſt not paid.] Or if he draws 3 Bills, to ſay in the 2d [my firſt and 3d not paid, *&c.*] and in the firſt [my 2d and 3d not paid, *&c.*] and in the 3d [my firſt and 2d not paid unto, *&c.*] otherwiſe he on whom the Bills are drawn might through miſtake pay more than one of the Bills.

35. If a Bill be preſented for Acceptance, and he on whom it is drawn will accept it only to pay part of the Bill, or at a longer time than is limited in the Bill, the perſon to whom it is payable muſt proteſt for Non-acceptance, as is before directed. But when the Bill becomes due, and the Payer is willing to pay part; ſuch part may be received and Receipt given for it on the backſide of the Bill; and Proteſt muſt be made for Non-payment of the remainder.

36. The Acceptance of a Bill by a Wife or Servant, or any other, not having an Order in Writing under Hand and Seal, ſo to do from the perſon on whom a Bill is drawn, is invalid, and is no legal Acceptance, unleſs it can be proved, that ſuch Wife, Servant, *&c.* uſed to accept Bills for ſuch perſon, the cuſtom of which will go a great way in making the Acceptance ſufficient.

37. Verbal Acceptance of a Foreign Bill is ſufficient, provided it be done before Witneſs. But the ſafeſt way is to cauſe him on whom the Bill is drawn to underwrite the Bill in theſe words [Accepted by me *A. B.*] Or if the Bill is drawn at ſo many days ſight, then the Acceptor muſt put the time when he accepts it, becauſe on that depends the time of payment, thus [Accepted *July* 4. 94. by me *A. B.*]

38. It is counted Ridiculous among Merchants to ſay in a Bill of

of Exchange [*Pray pay*, &c.] it being proper and Merchant-like, to ſay [*pay*, &c.] 1ſt. Becauſe Bills of Exchange are to have ſuch Honour and Reſpect as not to [*pray*] 2d. Becauſe Merchants being ſuppoſed men of great Buſineſs write only what is abſolutely neceſſary, avoiding all Complements and ſuperfluous Expreſſions. 3. Becauſe for the moſt part the Acceptor of a Bill has Effects in his Hands of the Drawers equivalent to the Content of the Bill, which he may demand at pleaſure.

39. There are four perſons principally concerned in all Bills of Exchange. 1. The Deliverer of the Money to the Drawer. 2. The Drawer or Indorſer who receives the Money and gives his Bill for it to the Deliverer. 3. The perſon on whom this Bill is drawn; and 4. Him, to whom it is payable. Of theſe the Deliverer of the Money to the Drawer and he to whom the Bill is payable are Correſpondents, and ſo are the Drawer and he on whom the Bill is drawn: So that the Drawer is anſwerable for his failure on whom the Bill is drawn; and he that paid the value to him that is to receive it: And in default of payment of a Bill he to whom it is made payable certifyeth the ſame to him of whom the Value was receiv'd, who preſently takes his courſe with the Drawer to whom the Value was paid both for his own and his Security to whom the Bill is payable; all which ought to be throughly conſidered before you can have any tolerable Notion of the Myſteries of Exchange.

Obj. But ſome may ſay, That if the perſon to whom a Bill is made payable can recover his Money of the Acceptor by due courſe of Law without proteſting, and not otherwiſe with proteſting, to what purpoſe are Bills proteſted?

Anſ. Becauſe in caſe of Proteſting he to whom the Bill is payable has the Security of the Drawer, Acceptor, Indorſers, and him that paid the Value for his Money, and may Sue all or which he pleaſeth by the Cuſtom of Merchants; but he can only Sue the Acceptor and him that paid the Value if Proteſt be not made.

40. If you pay a Debt with a Bill that is payable to you or Order you muſt firſt write your Name on the backſide of the Bill, which is Aſſigning it, as practiſed among Traders. But if you pay a Debt with a Note payable to ſuch a one or Bearer, then you only deliver the Note. And it is Wiſdom in Bankers, &c. That pay part of a Bill or Note to make the Indorſement croſs that part which is moſt wrote on, to avoid Deceipt by taking off the Indorſment.

§. 2. *Con-*

§. 2. *Concerning Factors, their Power, Duty, Commissions, &c.*

To make this Chapter usefull and intelligible it will be necessary to shew,

1. What a Factor is.
2. Commission to a Factor.
3. The Power of a Factor.
4. The Duty of a Factor.
5. Factorage, or Provision due to Factors.
6. Factors, called Brokers, what they are, their Business and Provision due to them according to Statute Law.

I. A Factor is one that is employed to buy or sell any kind of Merchandize for another, and differeth from a Servant in this; That whereas a Servant or Apprentice doth Business for a Yearly Salary, or for nothing but his Charges, and serveth only his Master; a Factor doth business for so much in every hundred Pounds worth of Goods he selleth or buyeth; which is called Provision (as shall be shewed by and by) and is employ'd for several Merchants or Traders at the same time, and is not their Servant but their Factor or Correspondent.

II. Commission to a Factor is the Order or Conditions given to him by his Employer for buying or selling any Commodity, by which he is to act.

All Commissions are either Absolute or Limited.

1. An Absolute or Perfect Commission is when an Employer gives his Factor free power to buy, sell or barter a Commodity at Discretion, or as he thinks fit; in which Commission are usually these words [*By (or Sell) such a Commodity as the Market goes;*] or [*as to price I leave it wholly to you, and desire you to act as for your self.*] But a Limited Commission doth bind or tye the Factor to a certain Price for the buying or selling any kind of Merchandize, in which Commission are usually these words [*Buy (or sell) such a Commodity at so much, or if you cannot, let it alone.*] For [*If you cannot buy or sell such a Commodity at such a price keep it till further order.*] And sometimes the word [*Commission*] is used for [*Provision.*]

III. The Power of a Factor dependeth on his Commission; and if he act contrary to that, he is liable for what Losses ensue thereby: Thus if a Factor have a limited Commission which orders him to sell Goods

Goods for ready Money, he has no power to give any time, for if he does and the Buyer proves Insolvent, the Factor must be responsible for the same to his Employer; but if this Factor had order to give time, and in that time the Buyer prove Insolvent; the Factor having observed his Commission the Loss shall be his Employers. Or if a Factor have an Absolute Commission to sell Goods to whom and at what time he thinks fit, then hath he the same power with the Merchant or Employer, and is not answerable for any Loss that may be the Consequence of his Dealing, but hath likewise power to make Composition with any one that breaks or proves Insolvent, and to abate as much of a Debt due to his Employer as he pleaseth, provided his Abatement is no more than the rest of the Creditors have done.

IV. As to the Duty of a Factor I shall shew it in most Cases, as briefly as I can; which is,

1. To be very exact in observing his Commission or Order of his Employer.

2. To be often advising the rise or fall of the Commodities his Employer deals in, and what sells best, and of the course of Exchange.

3. To answer all Letters punctually and in time; but especially,

4. A Factor is obliged to advise his Employer whenever he buyeth or selleth, shippeth off or receiveth Goods; for if he sells a parcel of Goods and neglects to give Advice thereof, and in the mean time the Buyer proveth Insolvent the Factor shall pay the Debt, altho' he had an absolute Commission, as aforementioned; for no Man giveth Commission to have his Goods sold and not to know of it, tho' the Commission be absolute with respect to the manner of selling.

5. If a Factor (says *Malyns*) sell Goods for his own account to another, payable at time, and receiveth the same when it is due, and in the mean time letteth other Mens Money remain in that Man's Hand unpaid for Goods by him formerly sold; this Factor is to be answerable for that Money to those other Men, altho' he should never recover a Penny of it, for he cannot without fraud bear with the non-payment of other Mens Money when due, and procure the payment of his own.

6. If a Factor buy a Commodity according to Commission, and afterwards the Price advanceth, and the Factor fraudulently converteth the gain thereby to his own use, the Merchant in this case may recover damages of his Factor, by the Custom of Merchants upon proof thereof.

7. If a Factor by the advice of his Employer buy a Commodity with his Employer's Money, or by his Credit, and the Factor without Advice ſelleth the ſame again for his own benefit, the Merchant ſhall recover this gain of the Factor, and ſhall be moreover amerced for the ſame.

8. If a Factor ſell his Employer's Goods to a Man diſcredited, and that Buyer afterward breaketh before payment, the Factor ſhall pay for the ſaid Goods, unleſs he can prove that he was ignorant of it, or that he truſted the Man for Goods of his own alſo.

9. If a Factor do by falſe Entry in the Cuſtom-Houſe conceal part of the Cuſtom without Advice of his Employer, whereby the Goods become forfeit to the Prince, the ſaid Factor ſhall anſwer the Value thereof to his Employer as they coſt, if for Goods to be tranſported, or as they might have been ſold, if it be for Goods to be Imported.

10. If a Factor or Merchant procure a Merchant-Strangers Goods, to pay but *Engliſh* Cuſtoms by ſaying they are his own; ſuch Factor or Merchant ſhall forfeit all his Goods to the King.

11. If a Factor make return to his Employer for the Neat proceed of Goods ſold, in prohibited Goods, without Commiſſion, the Factor ſhall bear the Loſs or Damage; but

12. If a Factor do any unlawfull act by order of his Employer, the Employer ſhall make good the ſame, and the Factor ſhall pay treble Damage.

13. If a Factor be robb'd of his Employer's Goods, he ſhall bear the Loſs.

14. If a Factor buyeth Goods which afterward becometh damnified by accident, the Merchant or Employer ſhall bear the Loſs.

15. A Factor is only chargeable with the Money which he receives for Goods ſold by him, *&c.* but if any part prove falſe Coin or bad he is to make it good.

16. If a Factor by Bill of Exchange maketh a Summ of Money payable to a perſon that breaks before the ſaid Bill is due to be paid; the Factor in this Caſe may and ought to countermand his Bill from the Accepter, which if he have paid the broken Merchant before due, he is anſwerable for the ſame to the Factor.

17. If a Factor have Orders from his Employer to Aſſure Goods, *&c.* for a certain Voyage, and have Money in his hands ſufficient to pay the *premium*; if this Factor neglect the ſame, and do not Inſure, and the ſaid Ship or Goods periſh at Sea; the Factor ſhall be anſwerable

rable for the Damage to his Employer, unleſs he give very undeniable Reaſon why he did not Inſure. Thus ſays *Malyns. Lex Merc.*

18. If a Factor having made Aſſurance upon Goods, &c. which happen to be loſt, and the Factor (having no Order, *Libra* or Commiſſion to at Diſcretion) maketh Compoſition with the Aſſurers, he ſhall be anſwerable to his Employer for what Abatements he maketh as well as for the reſt that was Aſſured.

19. If a Factor do wrong to a Merchant by Errors in Accompts, he is to make good the ſame, not only the Principal, but alſo of the Intereſt thereof; and the contrary, if the Factor happen to wrong himſelf by not charging the Merchant, and it is therefore uſual for all Factors in their Accompt of Sails or Invoyces to write at the bottom of the Accompt [*Errors excepted.*]

V. Factorage or Proviſion is the Wages of a Factor, and is ſo much to the Factor for every hundred pounds Value of the Proceed of Goods bought or ſold by the ſaid Factor, which Proviſion is uſually more or leſs, according to the diſtance of the Factory or place of Trade? thus,

A Merchant at *London* alloweth his Factor

	l. per. Cent.	
At *Barbadoes* and moſt other parts of the *Weſt-Indies*	5	Proviſion or, Comiſſion for Buying and as much for Selling.
At *Smirna* or *Aleppo* and other parts of *Turkey*	3	
At *Leghorn* and other parts of *Italy*	2½	
Spain, Portugal, or *France*	2	
Hamburgh and other parts of the *Eaſt-land*	2	
Rotterdam and other parts of the Provinces	1½	
Inlands Factors have uſually	1¼	

Sometimes 1½ *per. Cent.*

which Factorage is inſerted among the other Charges the Factor has been at concerning his Employer's Goods, as Ware-houſe Room, Brokage, Wharfage, Cuſtom, *&c.* and being deducted out of the Total Summ the Factor ſold his Employer's Goods for, or Added in Buying the remainder, or Sum is called the Proceed of the Accompt.

VI. Brokers are a kind of Factors there being Brokers for almost all kind of Trades, who are usually decayed Merchants or Men that know their Trade well, but perhaps have not a Stock to set up to trade themselves, having great Acquaintence, they are employed by Merchants to bring Customers to buy their Merchandize, for which the Merchants usually allow the Brokers about half *per Cent.* These Men are mostly of known Integrity, and upon the Broker's word the Merchants often give the Buyers Credit for many hundred Pounds worth of Goods.

There are also other kind of Brokers, *viz.* Exchange Brokers and Brokers of Stock.

Exchange Brokers make it their business to know the alteration of the Course of Exchange, and to inform Merchants that have Money to receive or pay beyond Sea, who are proper persons for Exchanging or doing thereof; as if I have 100*l.* Sterling to be paid at *Rotterdam*, &c. the Exchange Broker finds me out a Man to whom if I pay the Money here, will give me his Bill drawn upon his Correspondent to pay the like Summ there to my Factor or Order. Or if I have 1000*l.* to receive here from my Factor at *Hamburgh*, &c. this Broker will find me out a person that will pay me the Money here on Condition of my Bill drawn on my Factor to pay the like Summ in *Flemmish* Money to his Correspondent there; for which he has Brokage (as also to other places) 2 *s. per* hundred pound Sterling.

Brokers of Stock are such as buy and sell Shares in Joint Stocks for any one that shall desire them; as if I am minded to buy two Shares in the *East-India* Stock, I speak to a Broker if he knows of any to sell, he enquires and finds one that will sell two Shares, which the Broker buyeth for me at the Price currant on the Exchange, and when the same are transferred to me in the Company's Book, I pay for them. And it has been usual to give these Brokers for their Brokage or Provision as followeth:

	l.	*s.*	*d.*	
For *Hudsons-Bay* Stock	01	00	00	Per Share.
East-India	00	10	00	
Africa Stock, or other petty Stocks, as Glass, Lead, Linnen, Cop- per, &c.	00	05	00	

And at this Rate there are some have got 1000 or 1500 *l. per. An.*

But

But now the number of Brokers and their Brokage are limited by a Statute made *Anno* 8 and 9 *W.* III. which being requisite to be known both by Brokers, Merchants, and other Traders, I have inserted the Heads thereof, as follows.

1. *No person shall follow the Employment of a Broker, nor act as such within the Bills of Mortality of the City of* London, *until he be admitted by the Lord Mayor and Aldermen of the said City.*

2. *All Brokers shall at there Admittance take an Oath truly and faithfully to perform that Office between party and party without Fraud or Collusion according to this Act.*

3. *All Brokers within 3 Months after such Admittance shall take the Oath of Allegiance and Supremacy, as by the Statute* 1 W. and M. *and shall sign the Association appointed by an Act* 7 W. III. *and shall enter into a Bond to the Lord Mayor, Citizens, and Commonalty of the Penalty of* 500*l. (the Condition to which, as in this Act verbatim is expressed, you will find in the Chapter of Precedents following.)*

4. *The Number of these Brokers (including all the sorts beforementioned,* viz. *Exchange, Trade and Stock-Brokers) are not to exceed* 100.

5. *The Fees paid by a Broker at his Admittance shall not exceed* 40 *Shillings.*

6. *The Names of the Brokers admitted shall be affixed on the* Royal Exchange, Guild-Hall, *and other publick places, as the Lord Mayor,* &c. *shall think fit.*

7. *Any one using the Trade or Employment of a Broker who is not legally admitted shall forfeit* 500*l. over and above all other Forfeitures by this Act.*

8. *And if any person employ any Broker that is not thus legally sworn and admitted, such person shall forfeit* 50*l.*

9. *And if any person not being a sworn Broker, according to the true intent and meaning of this Act, shall deal as a Broker in discounting Tallies, Exchequer Bills, Bank Bills or Notes, or in Stock-jobbing, or selling of Bank Stock, or to any other Interest or Security upon any Fund granted by Parliament: Such person offending shall forfeit* 500*l. and being legally convicted shall stand in the Pillory* 3 *several days, one hour in the Morning of each day.*

10. *Every sworn Broker admitted as aforesaid, shall keep a Book which shall be called* The Brokers Book, *wherein shall be fairly entered*

red all Contracts and Bargains, within 3 days after making thereof, therein inserting the Buyer and Seller's Names, to the end such Book may be produced when lawfully required; and the Broker omitting to keep such Book shall forfeit 50 l.

11. *Any Broker taking above* 10 s. per Cent. (*i. e.* per *hundred pound value of the thing bought or sold*) *for Brokage, shall forfeit* 10 l.

12. *All Brokers legally sworn and admitted according to this Statute, shall carry about them a Silver Medal, having on one side His Majesty's Coat of Arms, and on the Reverse the Arms of the City of* London, *with the Name of such Broker, who shall at the concluding of all Bargains, Contracts, and Agreements by him made, produce such Meddal to the parties concerned, or shall forfeit* 40 s. *for every omission.*

13. *And if any Broker lawfully admitted shall deal for himself in Exchange or Remittance of Money, or shall buy any Tallies, Orders, Bills or Share, or interest in any Joint-Stock, to be assigned or transferred to his own use; or shall buy any Goods, Wares, or Merchandize to sell again for his own benefit, or shall make any gain or profit in buying or selling any Goods over and above the Brokage, he shall forfeit* 200 l. *and being convicted shall be uncapable to Trade, Act or Deal as a Broker for any person whatsoever.*

14. *All Contracts entred into or made by any person whatsoever, to be performed after the first of* May 1697, *and upon which any* Premium *already is, or shall hereafter be given for Liberty to put upon, Accept, Receive, Deliver or Refuse any Share or Interest in any Joint-Stock, Tallies, Orders, Exchequer Bills, Exchequer Tickets, or Bank Bills whatsoever (except such Contracts of the nature aforesaid as are to be performed within 3 days to be accounted from the time of making the same) is and shall be utterly null and void; and every such* Premium *shall be paid back and restored to those that gave the same, their Executors, Administrators or Assigns.*

15. *And if any* Premium *shall be given or paid contrary to this Act, or if any person shall Trade or Deal as a Broker not duly admitted according to this Act, and the same shall come to the knowledge of any sworn Broker, if he do not forthwith make discovery, but shall conceal such Offence, upon due proof thereof before the Lord Mayor and Court of Aldermen of the City of* London *against such sworn Broker, he shall be displaced, and be for ever incapable to Act or deal as a Broker for the future.*

16. *The Forfeitures given by this Act shall be recovered by Action of Debt, Bill, Plaint or Information in any of His Majesty's Courts of Record*

Record at Weſtminſter, *in which no Eſſoyn, Privilege, Protection or Wager of Law ſhall be allowed; and but one Imparlance, the one Moiety whereof ſhall be to the uſe of the King, His Heirs and Succeſſors, and the other to the Proſecutor.*

17. *Provided that no perſon for buying or ſelling Corn, Cattel, or other Proviſion, or Coal, ſhall be eſteemed a Broker within the meaning of this Act.*

18. *That no Broker ſhall buy, ſell, or bargain for Money, any Tallies or other Securities upon any Fund granted by Parliament unleſs he be licenſed ſo to do by any three of the Lords of the Treaſury, under the Penalty of forfeiting* 500 l.

19. *This Act is in force from the firſt of* May, 1697, *for* 3 *Years, and from thence to the end of the next Seſſion of Parliament.*

As to Pawn-brokers or Tally-men I think it not worth while to ſay any thing of them, but the Reader may find what they are in the Dictionary following.

CHAP XII.

Sheweth the Product or Commodities produced by all the Countries in the World, with the Chief Towns of Trade and Bigneſs, compared with England.

1. Great Britain *produceth theſe following.* viz.

BEſides the various kinds of Cattel, Deer, Fowl, (wild and tame) Fiſh, Grain, Fruits of the Field, Orchards and Gardens, *&c.* which would be too tedious, and not ſo proper for my preſent Subject; there are very fine and great abundance of Sheeps-Wool, as that of *Herefordſhire*, *Leiceſterſhire* and the *Iſle of Wight*; which maketh Woollen-Cloth (as fine as the *Spaniſh*) as that of *Devonſhire*, *Glocesterſhire*, *Yorkſhire*, &c. Stuffs; as thoſe of *Norwich*, Crapes, Grograms, Barateens, Camblets, Callamanco's, Antarines, Paragons, *&c.* of *Exeter*, as Says, Sempaternums, Perpetuanoes, *&c.* Druggets, Serges, Fuſtians, Bays, Silks, Velvets, Sattins, Flannels, Linnen-Cloth, and Flax and Hemp on which they

they are made; alſo very good Paper made of Linnen Cloth, Hats, Rugs, Bed ticking; excellent Lether of almoſt all ſorts; Tinn, Copper, Lead, Allom, Copperas; good Silver and Iron, and things made thereof; Stockings of all ſorts, as Silk, Worſted, Woollen and Thread; all ſorts of Iron-mongers Wares, Tallow, Hides, Oyls, Hopps, Butter, Cheeſe, Honey, Wax, Glew, Salt-peter, Gunpowder, Tobaco-pipe, Brick, Lyme, Slate, Marble, Alabaſter, and other Stones little inferior to Diamonds; Salt, Soap, Potaſhes, Glaſs and Saffron the beſt in the World; Sea Coal and *Scots*-Coal (in the *North* called *Cannel*;) Liquors of Malt and Apples, as Beer, Ale, Syder, Perry, Metheglin, Brandy, Mum, alſo Mead, beſides ſeveral ſorts of Wines not much inferior to thoſe of *Spain* and *France*, as Elderberry, Strawberry, Goosberry, Rasberry, and many others. It containeth 38 Counties of *England*, 16 Counties of *Wales*, and 35 of *Scotland*: Chief City, *London*; and of Trade, *London*, *Briſtol*, *Leverpool*, *Newcaſtle*, *Hull*, *Plymouth*, and *Falmouth*, in *England*; *Edenburgh*, *Aberdeen*, *St. Andrews*, *Glaſcow* and *Leith* in *Scotland*.

2. Ireland *produceth theſe Commodities.*

Wool, Yarn (excellent Good) Flax, Linnen-Cloth, Furrs, Hydes, Tallow, Hemp, Honey, Wax, Herrings and many other ſorts of Fiſh; Frizes, Ruggs, Salt-Beef, Pipe-ſtaves, Cattle (black and white) Butter, Cheeſe, Salt, Wheat (and moſt other Grains,) Iron, Lead. It containeth 32 Counties, the chief Towns of Trade *Dublin*, *Kinſale*, *Cork*, *Gallaway*, *Limerick*, *Droghedu*. This Country is about ⅓ of *England*.

3. France *produceth theſe Commodities chiefly.*

Wines, Paper, Almonds, Coral, Linnen-Cloth (as Dowlas, Lockrams, *&c.*) Salt, Brandy, Silks, Velvets, Buckrams, playing Cards, Glaſs, Wheat and all kind of Grain, Roſin, Prunes. It containeth 12 Governments beſides the Dutchy of *Lorrain* and *French Compte*, *Paris* is the chief City, but the chief for Trade are *Nants*, *Burdeaux*, *Lyons* and *Morlaix*. This Country is near 3 times as big as *England*.

4. *The* Low-Countries, or 17 Provinces *chiefly produce*,

Tapeſtry, Fine Linnen, Silks, Velvets, Ropes, Butter, Cheeſe, Buffs, Leather, Ox Hides, Armours, Bruges-Thread, Chimney-backs, Steel, Hopps, Bruſhes, Grograms, Camblets, Fine-Tape, Bottles, Pots, large Horſes, Salt, Soap, *&c.* Chief City of the *United Provinces Amſterdam*, and of the 10 *Spaniſh*, *Antwerp*; and

and chief of Trade, *Amſterdam*, *Rotterdam*, *Bruges*, *Antwerp* and *Middleburgh*. Theſe 17 Provinces are about ⅓ of *England*.

5. Spain *and* Portugal *produceth chiefly theſe Commodities*,

Wine, Wooll, Madera, Sugar, Oyls, Almonds, Anchovies, Anniſeeds, Figs, Raiſons, Barberries, Oranges, Lemons, Saffron, Soap, Iron, Allom, White-Marble, Licoras, Shumack, Cork, Woad, Rice, Silk, and Lamb-skins. It is divided into 20 Kingdoms and Provinces, the chief Town is *Madrid*, but chief for Trade are *Bilboa*, *Cadiz*, *Lisbon*, *Galicia*, *Barcelona*, *Maliga* and *Sevil*; and is more than twice as big as *England*.

6. Italy (*including the Common-wealth of* Venice) *produceth chiefly theſe Commodities*,

Sarſenets, Velvets, Taffata's, Fuſtians, Cloth of Gold and Silver; Wine, Cottons, Currans, Rice, Raw Silk, Allom, Vitriol, fine Glaſs, Grograms, Thrown-Silk, Sattin, Corn, Oyl, *&c* It is divided into 12 Provinces beſide the Iſles of *Sicily*, *Sardinia*, and *Corſica*; the chief City of all which is *Rome*, but the chief of Trade are *Leghorn*, *Venice*, *Meſſina*, *Genoa* and *Palermo*. This Countrey is (with the Iſles) as big as one and a half of *England*.

7. Germany *chiefly theſe Commodities*,

Wooll, Steel, Lattin, and Iron wire, Fuſtains, Lead, Coperas, Allom, Hamms, Linnen-Cloth, Yarn, Paper, Bell-mettal, Quickſilver, Mumm, Rheniſh-Wine, Tinn, and many Iron-works. It is divided into 10 Circles, the chief City is *Vienna*; of Trade *Vienna*, *Noremberg*, *Quidlinburg*, *Brunſwick*, *Emden*, *Strasburg*, *Franckfort*, *Collogn* and *Leypſick*. This Countrey is more than 3 times as big as *England*.

8. Swedeland, Norway, Denmark, *and other parts of* Eaſtland, *produceth*

Ox hides, Goat and Buck-skins, rich Furrs, Mettals, Oaks, Firrs, Honey, Tallow, Bow-ſtaves, Aſhes, Cables, Canvas, Maſts, Dale and Clap-boards, Pitch and Tarr, Cordage, Ropes, Hemp, Flax, Linnen, Yarn, Stockfiſh, Wax, Wainſcote, Wheat, Rye, *&c*. Chief Towns of Trade, *Hamburg*, *Bremen*, *Copenhagen*, *Stockholm*, *Wiborg*, *Sleſwick*, *Lubeck*, *Bergen*, *Calmar*, *Abo*, *Notteburg*, and *Riga*; theſe parts contain 13 Provinces or Parts. *Sweden* is twice as big as *Denmark*, and together, they are more than 4 times as big as *England*.

9. Poland *produceth chiefly*,

Maſts for Ships, Linnen, Pitch, rich Furrs, Wax, Boards, Salt, Amber, Aſhes, Milk, Butter, Cheeſe, Roſin, Soap, Corn. It is divided into 12 Provinces, chief Town is *Cracaw*, and of Trade,

Dantzick, *Wilna*, *Warſaw*, *Cracaw*, and *Breſt*. This Countrey is about 3 times as big as *England*.

10. Ruſſia, *or* Muſcovy, *produceth chiefly*,

Fine Leather, Furrs, Martins, Sables, Train-Oyl, Wax, Honey, Slad, Hemp, Flax, Iron, Salt-peter, Brimſtone, *&c.* It is divided into 37 Provinces, chief Town *Moſcow*, and of Trade, *Moſcow*, *Archangel*, *Kola*, and *Regan*. This Countrey is about 12 times as big as *England*, but a great part of it is uninhabited.

11. Turkey *in* Europe *produceth chiefly*,

Wines, Oyl, Mettals, Damask, Velvets, Vitriol, Sulpher, *Turkey* Grograms, *&c.* It contains 18 Provinces; chief Town is *Conſtantinople*, and of Trade, *Nipoli*, *Miſithra*, *Corfu*, *Salonichi*, *Belgrade*, *Adrianople*, *Setines* and *Bialogrod* or *Budziack*. This Countrey is about 5 times as big as *England*.

12. Turky *in* Aſia *produceth*,

Raw-Silk, Cotton-wooll, Druggs, as Opium, Gauls, Rubarb, *&c.* Soap, Camlets, Grograms, Tapeſtry, excellent Balm, Wine, Oyl, Cotton-Yarn, Mohair, Honey, Goats-hair, Worſted, Box-wood, and many other Commodities of leſſer note. This is that part of the World which the famous *Turkey* Company bring all their rich Ships from, and it is divided into 3 parts, *Natolia*, *Syria* and *Armenia*, and they are ſubdivided into 19 Beglerbegs, beſides the Iſles of *Cyprus*, *Rhodes*, &c. The chief Towns of Trade are *Aleppo*, (the chief of this Countrey) *Scanderoon*, *Smyrna*, *Famaguſta* (in *Cyprus*) *Maraz*, *Acſar*, *Burſa*, *Tarſo*, *Cogni*, *Amaſia*, *Acra*, *Ham*, *Tripoli*, *Scham*, *Damas*, *Gaza*, *Jeruſalem*, *Arzerum* and *Balſora*. This Countrey is about 6 times as big as *England*, to which, adding the *Turks* Dominions in *Europe*, and thoſe in *Africa*, as *Egypt* with part of *Barbary*, *Abiſſina* and *Zanguebar*, makes the whole *Turks* Dominions about 18 times as big as *England*, which is but $\frac{1}{17}$ of the whole Earth, altho' they are vulgarly accounted $\frac{1}{4}$ thereof.

13. Arabia *produceth chiefly*,

Gold, precious Stones, Coffee, Cinnamon, Myrrh, Balm, Frankinſence, Benjamin, Manna, Caſſia, Tea, *&c.* Chief Towns of Trade, are *Medina* (chief of the Country) *Mecca*, *Aylan*, *Heratt*, *Jamama*, *Ziden* and *Dhafar*. This Countrey is about 15 times as big as *England*, and borders *South-Weſt* on the Red-Sea where the Children of *Iſrael* paſſed through on dry Land.

14. Perſia

14. Perſia *produceth chiefly*,

Precious Stones, eſpecially rough Diamonds, Manufactures of Gold and Silver, rich Silks, Carpets, Sele-skins, Goat-skins, Alabaſter, Myrrh, Fruit, and almoſt all ſorts of Mettals. Chief Towns of Trade are *Heſpaam* (the chief of this Country) *Amoul*, *Souſter*, *Siapour*, *Sliras*, *Lar*, and *Taures*. This Country is about 13 times as big as *England*.

15. *The* Eaſt-Indies *or* Mogul's *Empire produceth chiefly*,

Callicoes, Canes, Cottons, Velvets, Silk, Taffata's, Carpets, Muſlain, Indigo, Alloes, Sattins, Salt-peter, Spices, Amber, Borax, Ambergreece, Rhubarb, Wormſeed, Sal-Armoniack, Rice, Tea, Fans for Women, Cornelian Rings, Aggats, rough Diamonds, Pearl, China-Ware, Cocoa-Nutts, Cinnamon, Ginger, Pepper, Caſſia, Gold and Silver, Proceline Earth, Bengale and Alabaſter. Chief Towns of Trade are (on this ſide the *Peninſula*, or neareſt part of *India*) *Surrat*, *Bombay*, *Cambay* and *Daman*; and on the farther ſide the *Peninſula*, the chief Towns are on the Coaſt of *Coromandell*, *Bengale*, *Fort St. George*, *Biſnagar*, *Maliapur*, *Negapitan Hughley*, *Balſoar* and *Agra* the Seat of the *Great Mogull*. This Countrey is about 19 times as big as *England*.

16. China *produceth chiefly*,

Gold, Silver, precious Stones, proceline Diſhes, China-Ware, Quickſilver, China-wood, Sugar, Cottons, Silks, Camphire, Rhubarb, Civett, Musk, Ginger. Chief Towns of Trade are *Pekin*, *Kianguin*, *Hangchen*, *Cinan* and *Quanchen*. This Countrey is about 18 times as big as *England*, and is ſaid to have in it 1485 Cities.

17. Tartary *produceth chiefly*,

Rich Furrs, as Sables and Martins; Musk, Cinnamon, Silk, Flax, Camletts, Rhubarb, and other Druggs. Chief Towns of Trade, *Togull*, *Cambalu*, *Xamo* and *Charcan*. This Countrey is the biggeſt Empire in the World, being 70 times as big as *England*, and greater than all *Europe*, tho' the *N. E.* is little known.

18. Georgia *produceth*,

Bevers, Martins, and other Furrs; Leather, Wax, Linen, Thread, Honey. Chief Towns of Trade, *Tefflis*, *Sophia* and *Zittach*. This Countrey is about 3 times as big as *England*.

19. Africa *produceth chiefly*,

Gold, Ambergreece, Elephants-teeth, Guinea-pepper, Red-wood, Hydes, Wax, Sanders, Sugar, Civett, Oyl, Cordavans, Hemp, Flax, Dates, Almonds, Indigo, Gum, Oſtrage-feathers, Amber, Ebony, Canes, Rice, Citrons, Lemmons, Copper, Coco-nuts, Cloves, Saf-

ſron, Chriſtal, and abundance of Negroes, which furniſh our Plantations in *America* with Slaves. In this Countrey the Royal *African* Company have had ſeveral Factories along the Sea-coaſt, between *Guinea* and the *Cape of Good Hope*, as *Gambo*, *Sierra-Leona*, *Madre-Bomba*, *Cape Miſſerado*, *Cormontyn*, *Emacham*, *Rio-Nuno*, *The Ivory coaſt*, and *The Gold coaſt*, ſome of which are now under the *Dutch*. There are likewiſe many curious Towns of Trade, or Ports in *Barbery*, as *Sally*, *Morocco*, *Tangier*, *Fez*, *Ceuta*, *Algiers*, *Sancta Crux*, *Saphia*, *Tripoli* and *Barca*. And the *Madagaſcar Iſle* produceth Ginger, Cloves, Red Sanders, Saffron, Wax, Amber, Gum, Ebony Criſtal, Cocoa-nuts and Mettals. Chief Towns of Trade, *Charemboule* and *Fauſhere*. *Africa* is about 120 times as big as *England*, and the Iſle of *Madagaſcar* is about 2 times as big as *England*.

20. America *produceth chiefly*,

1. About the *North* part the *Hudſons-Bay* Company bring Bever and other rich Furrs, Whale-Oyl, Stockfiſh, *&c.* Their chief Towns and Places of Trade are *Inquebet*, *Quebeck*, *Port-Nelſon*, *Hudſons-Bay*, *Padouſack*, *Breſt* and *Port-Royal*. 2. The middle part produceth theſe excellent Commodities, *viz.* Cotton-Wooll, Sugar, Tobacco, Furrs, Indigo, Ginger, Cloves, Mace, Nutmegs, Roſin, Turpentine, Copper, Tarr, Deal-boards, Gold, Silver, Pearls, Cocheneal, Honey, Balm, Amber, Hides, Tallow, Salt, Medicinal Druggs. Chief Towns of Trade are *Boſton* and *London* in *New England*, *New York*; *Philadelphia* in *Penſilvania*; *Oxford* in *Maryland*; *James Town* and *Wiccommoco* in *Virginia*; *Charles Town* in *Carolina*; *Port-Royal*, *Sevill* and *St. Jago* in *Jamaica*; *Antego* and *Barbadoes* of the *Charribe Iſles*, and *Mexico* in *New Spain*. 3. The *South* part of *America* produceth, beſide Veniſon, Fiſh and Fowl, Gold and Silver in abundance, Balſom, precious Stones, Long-pepper, Gums, Roſin, Druggs, Cottons, Tobacco, Cochenele, Braſil-wood, Sugar, Train-Oyl, Braſs, Iron, Copper, Honey. Chief Towns of Trade, *Caramanta*, *St. Migvel*, *Panama* and *Morequinto* in *Firmland*; *Poſton*, *Cuſco*, *Limma*, *Baeſa* and *Creux de Nueva* in *Peru*; *St. Salvador*, *St. Vincent* and *St. Sebaſtian* in *Braſil*; *Aſſumption*, *Conception*, *Villa-Rica* and *Cividad* in *Paragua*; and *St. Jago*, *Mondoe* and *Sorena* in *Chile*. This part of the World called *America* is about 90 times as big as *England*.

CHAP.

CHAP. XIII.

Concerning Rates of Foreign Poſt Letters.

BY an Act of Parliament made *Anno* 12 *Car.* II. Chap. 35. confirmed by Act of Parliament, 13 *Car.* II. Chap. 7. the Rates of Poſt-Letters ſent out and into *England* to and from beyond the Sea are as followeth.

	Letters ſent outward.	*Single.*	*Doub.*	*Treble.*	*Ounc.*
	The Port of Letters from *England.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
Ireland.	To *Dublin* in *Ireland*	0 : 6	1 : 0	1 : 6	2 : 0
France.	To *Paris*	0 : 9	1 : 6	2 : 3	2 : 0
	To *Bourdeaux, Rochell, Nants, Byon, Orleans, Tours,* and places of like diſtance, Port paid to *Paris*	0 : 9	1 : 6	2 : 3	2 : 0
	Morlaix, St. Maloes, Caen, Newhaven, and places of like diſtance, Port paid to *Roan*	0 : 6	1 : 0	1 : 6	1 : 6
Holland and *Flanders*	*Sluis, Fluſhing, Middleburg, Delph, Amſterdam, Rotterdam, Hague, Liſle, Dunkirk, Oſtend, Ipre, Antwerp, Ghent, Bruges, Bruſſels* and other parts of *Holland* and *Flanders.*	0 : 8	1 : 4	2 : 0	2 : 0
Germany and *Poland.*	*Noremberg, Bremen, Dantzick, Lubeck, Leypſick,* and other places of like diſtance, Port paid to *Hamburgh*	1 : 0	2 : 0	3 : 0	4 : 0
	Hamburgh, Collogn, Franckfort, Port paid to *Antwerp*	0 : 8	1 : 4	2 : 0	2 : 0
Venice.	*Venice, Legborn, Geneva, Rome, Naples, Meſſina,* and other parts of *Italy* by way of *Venice Franc pro Mantua*	0 : 9	1 : 6	2 : 3	2 : 8
Turkey.	*Smirna, Aleppo, Conſtantinople, Marcelia,* and other parts of *Turkey,* Port paid to *Marcelia*	1 : 0	2 : 0	3 : 9	3 : 9

The

The Port of Letters to *England.*	*Single,*	*Doub.*	*Treb.*	*Ounc*
France. From *Calais, Diep, Bouloign, Abbeville, Amience, St. Omer,* and *Montrell*	s. d. 0 : 4.	s. d. 0 : 8	s. d. 1 : 0	s. d. 1 : 0
Rouen	0 : 6	1 : 0	1 : 6	1 : 6
Bourdeaux, Nants, Rochel, Byon, Tours, Orleans, and places of like diſtance	1 : 0	2 : 0	3 : 0	4 : 0
From moſt other parts of *France, Italy, Germany,* and *Turky*	0 : 8	1 : 4	2 : 0	2 : 0
But from *Leghorn, Genoua,* and other parts of *Italy* by way of *Lyons Franct. pro Lyons*	1 : 0	2 : 0	2 : 9	3 : 9

And note, That by a Proviſo of the Act aforeſaid, no Merchant ſhall pay any thing for the Port of any Accompt not exceeding one Sheet of Paper. And all Bills of Exchange, Invoyces, and Bills of Lading ſhall be allowed without Rate in the price of the Letters.

And likewiſe the Covers of Letters not exceeding $\frac{1}{4}$ of a Sheet of Paper ſent to *Marſeilles, Venice* or *Leghorn* to be ſent forward to *Turkey,* ſhall paſs without Rates.

The Days of ſending Letters to Foreign Parts are,

Monday.] To *France, Italy, Spain, Flanders, Germany, Sweden* and *Denmark.*

Tueſday.] To *Holland, Flanders, Sweden, Denmark, Germany,* and all parts of *England, Wales, Scotland* and *Ireland.*

Thurſday.] To *France, Spain, Italy,* and all parts of *England* and *Scotland.*

Friday.] To the *Netherlands, Germany, Sweden, Denmark.*

Saturday.] To all parts of *England, Scotland* and *Ireland.*

The Days Foreign Males are due at *London.*

Monday and *Friday.*] From *Holland* and *France.*

Monday and *Thurſday.*] From *Flanders.*

Monday, Wedneſday and *Friday.*] From *Ireland.*

Once a Fortnight from *Spain.*

CHAP.

CHAP. XIV.

A DICTIONARY, *or Alphabetical Explanation of moſt difficult Terms commonly uſed in Merchandize and Trade.*

A.

Account of Sales.] An Account wherein the Sale of Goods is expreſſed.

Agai.] The difference in *Holland* or *Venice* of the Value of Currant Money and Bank-Notes, which in *Holland* is often 3 or 4 *per Cent.* in favour of the Notes.

Apparel.] (Of a Ship) the Sails.

Allotting of Goods.] Is when a Ships Cargo is divided into ſeveral parts, which are to be bought by divers Perſons whoſe Names are wrote on as many pieces of Paper, which are applied by an Indifferent Perſon to the ſeveral Lotts or Parcels; and by this means the Goods are divided without Partiality, for every Man has the parcel of Goods that the Lott with his Name on, is appropriated to. *Vid. Inch of Candle.*

Arbitration.] Is when two Traders, *&c.* cannot agree about the Terms of ſome Contract, they each chooſe a Man to make an end of the Difference; and if theſe 2 cannot agree, the matter is uſually referred to a 3d perſon called an Umpire, to whoſe Deciſion both ſides are obliged to acquieſce.

Aſper.] A *Turkiſh* Coin about five Farthings in Value.

Aſſignee.] One to whom a thing is lawfully aſſigned or made over.

Average.] Is 1ſt. the general Allowance made to a Maſter of a Ship of 1 *d.* or 2 *d.* in every Shilling Freight (as mentioned in the Bill of Lading;) or, 2d. An Allowance to him upon ſpecial occaſions when he ſuſtains Damage, which is equally divided upon all his Freight, and paid by each Merchant according to his Cargo. Or, 3. The Contribution that ſeveral Inſurors pay to make good the loſs of Goods caſt overboard which are by them inſured.

Aume.] (Of Rheniſh Wine) is forty Gallons.

Arrear.] Behind-hand or owing.

Auln.] *Vid.* Exchange of Coin, of the Par of Exchange.

B.

Ballance an Accompt.] To make the Dr. and Creditor-ſides alike. See Chap. 10. §. 10.

Bale.

Bale.] A Pack of Merchandize, but is of different quantity, as of

Cotton-Yarn-3 to 4 *C.*
Raw-Silk —— 1 to 4 *C.*
Lockram or Dowlas 3, $3\frac{1}{2}$ or 4 pieces.

Bagg.] An uncertain quantity, as of

Almonds about 3 *C.*
Anniſeeds —— 3 to 4 *C.*
Pepper —— $1\frac{1}{4}$ to 3 *C.*
Goats-Hair — 2 to 4 *C.*
Cotton-Yarn — $2\frac{1}{2}$ to $4\frac{1}{2}$ *C*, *&c.*

Barter.] (or Commutation) To Truck or Change one Commodity for another.

Baratry.] (of the Maſter of a Ship, *&c.*) Is his cheating the Owners or Inſurors either by running away with their Ship, or imbezeling their Goods, *&c.*

Basket.] An uncertain quantity, as of

Medlars 2 Buſhels.
Aſſafetida 20 to 50 ℔ weight.

Batman.] *Vid.* Exchange of Coin.

Bill of Parcels.] An Account of the particular ſorts and prizes of Goods bought, given by the Seller to the Buyer.

Bill of Entry.] Is an Account of the Goods entred at the Cuſtom-houſe, both Inward and Outward, in which is expreſſed the Merchant Exporting or Importing: the Quantity of Goods and Sorts, and whither Tranſported, or from whence.

Bill of Exchange.] Is a ſhort Writing, ordering the Payment of a Summ of Money in one place, to any perſon aſſigned by the Remitter, in conſideration of the like value paid the Drawer in another place.

Bill of Lading.] An Inſtrument ſigned by the Maſter of a Ship, acknowledging the Receipt of the Merchant's Goods, and obliging himſelf to deliver the ſame in good condition at the place to which they are conſigned; of which they are uſually 3, 1ſt. is given to the Merchant to keep, a 2d. ſent to the Factor to whom the Goods are conſigned, and a 3d. is kept by the Maſter of the Ship. *Vid.* Chap. 15.

Bill of Debt.] *See* Chap. 15.

Bill of Sale.] *See* Chap. 15.

Bind.] (of Eels) 10 Strike, each 25 Eels.

Bolt.] (of Canvas) 28 Ells.

Bottomage, or *Bottomree.*] Borrowing Money on a Ship, and lending Money on Bottomree, is to lend Money to the Maſter of a Ship to be paid with Intereſt at 40 or 50 *per Cent.* at the Ship's ſafe return, which if the Ship never do, the Lender never has his Money, and therefore is the Intereſt uſually ſo great.

Book of Rates.] Is a ſmall Book eſtabliſhed by Parliament, declaring at what Value, Goods that pay Poundage (or $\frac{1}{20}$ part of the Value) ſhall be reckoned, ſo that a 20th part of the Summ found in

in the Book of Rates is taken for the Duty payable by the Acts of Tunnage and Poundage.

Box.] An uncertain Quantity, as of Quickſilver 1 to 2 C.
Prunelloes 14 lb.
Rings for Keys 2 Groſs, *&c.*

Break Bulk.] Take out part of the Ships Lading or Cargo.

Brait.] (Diamonds) Rough Diamonds.

Broker.] Buyers and Sellers of Goods for others, *&c. Vid.* 3 ſorts thereof Chap. 11. in the 2d Sect.

Brokage.] (or Brokerage) The Wages or Proviſion given to them. *Vid.* Chap. 11. Sect. 2.

Brace.] *Vid.* Exchange of Coin, *Ar.* 3.

Bundle] Of Baſt Ropes, Harneſs Plates, Glovers Knives } 10

Hamborough-Yarn 20 Skeans.
Basket-Rods, 3 foot about at the Band.
Bulruſhes $\frac{1}{60}$ of a Load.

Burden.] (of Gadſteel) 180 lb.

Butlerage.] A ſmall Duty paid for Wine Imported by unfreemen.

Butt.] Of Sack—2 Hogſheads.
Currants—15 to 22 C.

C.

Cargo.] Freight, or the Ship's Lading.

Cagg or *Kegg.*] (of Sturgeon) 4 to 5 Gallon.

Cade.] Of Red-herrings 500
Spratts——1000.

Caniſter.] Of Tea, 75 to 1 C. weight.

Cask.] (An uncertain Quantity as) of Sugar 8 to 11 C. weight,
Almonds about 3 C.

Caroteel.] of Cloves 4 to 5 C. weight.
Currans 5 to 9 C.
Mace, about 3 C.
Nutmegs 6 to 7½ C, *&c.*

Carage.] Of Lime 64 Buſhels.

Caſe.] Of *Normandy*-Glaſs 120 foot.
Recorders 5.

Charter Party.] An Inſtrument, or Writing drawn between a Merchant and Maſter of a Ship, containing the ſeveral Articles or Particulars of their Agreement. *Vid.* Cap. 15th. the Form of one.

Cheſt.] (uncertain Quantity, as) of Sugar 10 to 15 C. weight.
Glaſs 2 to 300 foot.
Caſtle-Soap 2½ to 3 C. weight.
Indigo 1½ to 2 C. 5 ſcore to the C. *&c.*

Chique.] *Vid.* Exchange of Coin.

Chevisſaunce.] Compoſition between Debtor and Creditor

Cloſſe.] *Vid.* Tare.

Cloſe an Accompt.] To cloſe an Accompt is to make an end or ſhut up an Accompt when you intend to write no more thereto, and is done by drawing a Line, *&c.*

Clough.] (or Draught) An Allowance of 2 pound at every 5 C. weight for the turn of the Scale,

that ſo the Commodity may hold out when retailed.

Coard.] of Wood, 4 foot long, 4 foot broad, and 8 foot deep.

Cocket.] A Cuſtom Warrant wrote on a ſmall piece of Parchment with the Seal of the Cuſtom-houſe given to a Merchant upon Entry of his Goods, certifying that the ſame are Cuſtomed.

Colour Strangers Goods.] Is when a Freeman or Denizon permits a Foreigner to enter Goods at the Cuſtom-houſe in his name, whereby the Foreigner, who in many caſes ſhould pay double Duty, by being entered in the Name of a Freeman pays but ſingle Duty, againſt which there are many ſevere Laws.

Collibis] A Money-changer.

Commutation.] *Vid.* Barter.

Commiſſion of Bankrupt.] A Commiſſion from under the great Seal of *England* directed to five or more Commiſſioners, to enquire into the Particulars of a Man's Circumſtances that is failed or broke (as we call it.) Theſe Commiſſioners are to act according to certain Statutes made in that behalf; as 34 and 35 *Hen.* 8. *c.* 4. 13 *Eliz. c.* 7. 1 *Jac.* 1. *c.* 15. 21 *Jac.* 1. *c.* 19. 14 *Car.* 2. *c.* 24. for Relief of Creditors.

Who may be Bankrupts.

All Perſons (by the Statutes above) uſing Trade by way of Bargain, Exchange, Barter, Cheviſaunce, or otherwiſe in Groſs or Retail, or ſeeking Trade, of living by Buying or Selling, Subject, or Denizon, Scrivener, *&c.* that obtains Protection, unleſs by Parliament, that exhibited Bill againſt Creditor to take leſs than due, or to procure longer time of payment than was given at the time of the Original Contracts; or being indebted 100 *l.* or more, ſhall not pay or compound for the ſame within 6 Months after due, and the Debtor be arreſted for the ſame; or within 6 Months after an Original Writ ſued out to recover the ſaid Debt, and notice thereof given to him or left in Writing at his Dwelling-houſe or laſt place of abode; or being arreſted for Debt, ſhall after his Arreſt lie in Priſon two Months or more upon that or any other Arreſt or Detention in Priſon for Debt. Or being arreſted for 100 *l.* or more of juſt Debt ſhall at any time after ſuch Arreſt eſcape out of Priſon, or procure his Enlargement by putting in common or hired Bail, ſhall be accounted and adjudged a Bankrupt; except as by Stat. 14 *Car.* 2. *c.* 24. ſuch as have Stock in the *Eaſt-India*, or Royal Fiſhery, or *Guinea* Companies, who ſhall not be eſteemed Merchant or Trader.

Commiſſioners, how to act.

Commiſſioners in the Commiſſion of Bankrupt may (by the Majority) within 6 Months con-

vey

vey all Lands, *&c.* to the uſe of the Creditors, unleſs remainder be in the King by his Gift; and they may ſell what the Bankrupt poſſeſſeth as owner tho' ſold before, *&c.*

Commiſſioners (as aforeſaid) may Authorize to break open Houſe, Shop, Trunk, *&c.* and ſeize.

Commiſſioners (as above) may examine Offenders on Interrogatories, and alſo the Wife of the Bankrupt.

Commiſſioners may aſſign Debts due, or to be due, and properly alter as if made to them.

Commiſſioners (as aforeſaid) may examin the Bankrupt on Oath, and on notice thrice at his Houſe, to be declared a Bankrupt, and on 5 Proclamations not appearing, to be apprehended.

Commiſſioners may proceed to Execution, on death after Commiſſion and before Diſtribution.

Commiſſioners being ſued may plead this General Iſſue and give the Statute in Evidence.

Commiſſioners may commit ſuch as refuſe to anſwer fully.

Commiſſioners to allow Charges to Witneſſes ſent for.

Commiſſioners to declare (on requeſt) the beſtowing of Bankrupts Money, *&c.*

Commiſſioners to ſee that Creditors be relieved *pro Rata* without regard to greater or leſſer Security.

Commiſſions of Bankrupt to be ſued forth within 5 Years after being a Bankrupt, and any Creditor, within 4 Months after the Commiſſion and until Diſtribution, may partake paying ſhare of Charges.

Commiſſion to a Factor.] *Vid.* Chap. 11. Sect. 2.

Commerce.] Trade of Buying and Selling.

Company.] (of Merchants) are either, 1. Companies in Joint-Stocks, as the *Morea* Company, *Eaſt-India* Company, and *Greenland* Company; or, 2. Regulated Companies, as the *Hamborough*, *Turky*, *Eaſtland*, and *Muſcovy* Companies.

Compoſition.] By Compoſition in the way of Trade is meant, when a Debtor cannot pay his whole Debt, he agrees with the Perſon to whom he oweth Money to take part in lieu of the whole Debt, for which part he obtaineth a Receipt in full, as for the whole Debt; and this Money is ſaid to be paid by Compoſition.

Conſign Goods.] Is to preſent, deliver, or aſſign over; eſpecially Goods are ſaid to be conſigned to a Factor when they are ſent him by his Employer to be ſold. *&c.* or when a Factor ſendeth Goods to his Employer the Goods are ſaid to be conſigned to that Employer.

Contraband Goods.] are ſuch as are prohibited Importation, as

Buttons, Thrown-silk, Bone-Lace, Sword-Blades, *&c.*

Copes-Mate.] A Partner in Merchandizing.

Cordage.] The Tackle of a Ship.

Correspondent.] When two Men hold a mutual Familiarity or Commerce by Letters, Invoyces, *&c.* they are Correspondents.

Counterpoize.] To weigh one against another.

Crainage.] Money paid for the use of a Crain, by which bulky Goods are drawn up to Shore, out of Ship, Hoy, *&c.*

Creditor.] One that gives Credit or lendeth to another.

Cruizers.] Ships that sail upon the Ocean with design to fight and take Enemies Ships.

Creek.] or Gulf. A crooked Shoar, where two Corners of Land extend themselves into the Sea at some small distance, between which a Vessel may sail.

Crown.] currant, *&c.* See Exchange.

Custom.] Is a Duty paid by the Subject to Kings or Princes for protecting them in their Trade from Enemies, *&c.*

Cubit.] 18 Inches.

D.

Debtor.] One that is indebted to another.

Debenture.] They are owing; or an Arrear; or as most commonly used among Merchants, is the Allowance of Custom paid Inward, which a Merchant draws back upon Exportation of that Commodity which was formerly Imported.

Demurrage.] An Allowance to the Master of a Ship by the Merchants for staying in a Port longer than the time prefix'd for his departure. *Vid.* Freight of Ships, Chap. 11.

Dicker.] (Of Leather or Knives) 10; of Necklaces 10 Bundles, each Bundle 10 Necklaces.

Denier.] *See* the Table in Exchange.

Discount.] Set off, deduct or abate in consideration of prompt payment which is usually what the Interest comes to; as if I owe 100*l.* and by contract am to pay at the end of 6 Months, if I pay the same presently I am to have the Interest of 100*l.* for 6 Months discounted to me, *i. e.* I am but to pay 97*l.* *See* Rebate.

Disembarque.] Take Goods to Land out of a Ship or Vessel.

Distrain.] Take away Goods for the payment of a Debt.

Ditto.] The same. or the said.

Dividend.] (or *Divident*) In Arithmetick, the Number to be divided: But of a Company to make a Dividend is to assign how much of the Profits gained by a Companies Trading is proportioned or justly due to each Share contained

contained in the whole Joint-Stock, ſo that each Member by knowing how many Shares he has therein may know what he is to receive of the whole Gain.

Diary.] (or *Diurnal*) A Day-book, or an Accompt of every Days proceedings in Trade, *&c.*

Dock.] A place where Ships are built, refitted, or laid up.

Ducat and *Ducatoon.*] *See* Exchange of Coin.

Dovane] The Cuſtom-houſe at *Lyons.*

Drapery.] Cloth-marker, or that reſembling the Cloathing of a Picture.

Draught.] (of a Ship) the Number of Feet under Water when Laden; alſo an Allowance in weighing: *Vid.* Clough.

Drugs.] Simples (of which the moſt part are dry) ſome whereof are Medicinal, as Jeſuits Bark, Gallingal, Allom, Rubarb, Cream of Tartar, *&c.* Others are Grocery Drugs, as Coffee, Tea, Tamerins, Anniſeeds, Cocoa-Nutts, Ginger, *&c.* almoſt innumerable.

Dina.] An *Eaſt-India* Coin about 30 Shillings Sterling.

Duty, or *Additional Duty.*] Money paid for Cuſtom of Goods, *&c.* to be apply'd to the King's own uſe, as that of Tunnage, Poundage, *&c.*

E.

Effects.] Merchants Goods or Concerns.

Embargo.] Is ſaid to be laid on Shipping, when by order of the Government none may come into the Nation or Port; ſometimes that none may go out, and ſometimes, that none may neither come in nor go out.

Empory.] An Exchange.

Enchiridion.] A Pocket-book or *Vade mecum.*

Endorſe.] To write on the backſide of any Inſtrument or Writing ſomething relating to the matter within; as to

Endorſe,] (a Note) Is to write on the backſide what part there of is paid, alſo when and by whom, as uſed by Bankers, *&c.*

Endorſe.] (a Bill of Exchange) To order another to receive the Content of a Bill that is payable to me or my Order, which is done by writing my Name on the Backſide; as if *A* draws a Bill of 100 *l.* payable to *B.* or Order, which is accepted upon preſentation, but before the Bill is payable, *B.* has occaſion to pay 100*l.* to *D*, ſo he writes his Name on the Back and delivers to (*D*) the Bill; and *D.* having occaſion to pay to *E.* 100*l.* writes his Name on the Backſide and delivers the Bill to *E*, *&c.* So all they that have wrote their Names on the Backſide are Endorſers, and he that has the Bill laſt, if the Acceptor will not pay it may proſecute both all the Endorſers and the Drawer, and Acceptor, or any

ny of them by the Cuſtom of Merchants.

Enfranchis.] Encorporate into a Body or Society, as all our Corporations are.

Enhance.] To raiſe the price of any thing.

Epha.] A *Jewiſh* Meaſure of four Gallons and an half.

Eſcambio.] A Licenſe to make over a Bill of Exchange to one beyond Sea.

Exaction.] Taking unlawfull Fees.

Exchangers.] Men that return Money beyond Sea.

Exchange Brokers.] Men that tell how the Exchange goes, and find thoſe that will Exchange. *Vid.* Factors. Chap. 11. §. 2.

Extortion] Taking more from another for Uſury, *&c.* than is juſtly or legally due.

F.

Factor.] A Merchant's Agent *&c. Vid.* Chap. 11. §. 2.

Factorage.] The Wages that a Factor has: *Vid.* Chap. 11.

Faggot.] (of Steel) 120 pound weight.

Fangott.] An uncertain Quantity, as of Raw-ſilk 1 to 2¾ C. Grogram and Mohair Yarn 1½ C. to 2½ C.

Fatt] An uncertain Quantity, as of Yarn 210 to 221 Bundles; Unbound Books ½ a Maund; Wire 20 C. to 25 C. weight; Iſinglaſs 3¼ C. to 4 C. weight.

Florin.] *See* Exchange of Coin.

Fodder.] of Lead 19½ C.

Fond or *Fund.*] A Foundation or Stock in Money or Money worth.

Foreſtall.] To buy Goods before they come to Market with intent to advance their price.

Foundered.] A Ship is ſo when it is filled with Water by a Storm.

Fraight.] or *Freight*, Is the Merchandize a Ship carries; and ſometimes the Money paid for ſuch Carriage is called *Freight.*

Frail.] of Raiſins about 75 pounds.

Franchiſe.] Freedom or Privilege.

Friſt.] To ſell Goods at time or upon truſt.

Folio.] A Leaf, or 2 Pages of the Ledger, *&c.*

G.

Gabarage.] That which *Iriſh* Goods are wrapped in.

Gabell.] Tribute or Cuſtom paid to Princes.

Gaffe.] An Iron Hook to pull great Fiſhes into a Ship.

Garble.] the Duſt and Droſs that is ſever'd from Spices, *&c.*

Garbling.] Picking the worſt from the beſt of any Commodity.

Gare.] Very courſe Wool.

Gild.] A Company combined with leave of their Prince.

Gild-Merchant.] A Privilege whereby Merchants may hold Pleas of Land within themſelves.

Gilder.]

Gilder] *See* Exchange of Coin.

Groſs.] 12 Dozen; *Vid.* the Table of Dozen at the beginning of this Treatiſe.

Groſs-weight] the weight of the Goods or Merchandize, Duſt and Droſs mixed therewith; and of the Bag, Cheſt, Frail, or other thing in which they are contained, out of which Groſs-weight allowance is made for Tare and Trett.

H

Hairs-breadth.] Is accounted among the *Jews* the forty eighth part of an Inch.

Hallage] Toll or Duty paid for any Commodity brought to be vended in a Hall.

Hand breadth.] three inches.

Harping-Irons.] Iron Inſtruments to ſtrike Whales and other great fiſhes withall.

Harpiniers.] thoſe that ſtrike Fiſh with the Harping-Iron.

Hin] A *Jewiſh* Meaſure of about 3 Quarts.

Hogſhead.] 63 Gal. *Vid.* Ch. 1.

I

Jarr.] (of Oyl) 18 to 26 Gal. Green-ginger about 100 pounds weight.

Immunity.] Privilege or Freedom.

Importuous.] without Port or Haven.

Import Goods.] to bring them into a Port.

Impoſt.] (of Goods) the Tax or Cuſtom paid for Merchandize to be apply'd to the Subjects uſe as a Duty is to that of the King.

Indorſe.] *Vid.* Endorſe.

Ingenio.] The Sugar-houſe at *Barbadoes.*

Inland Town.] One that ſtands far in the Land to which no Veſſel can ſail.

Inland Trade.] Trade that is managed wholly in one Country.

Inland Bills.] Bills payable in the ſame Land in which they are drawn.

Inch of Candle.] Goods are ſold by Inch of Candle, when a Merchant or Company of Merchants (as the *Eaſt-India* Company, *&c.*) having a Cargo of Foreign Goods arrived, are minded to make a ſpeedy ſale thereof. In this Caſe notice is uſually given upon the Exchange by Writing, and elſewhere, when the Sale thereof begins; againſt which time the Goods are divided into ſeveral Parcels called Lotts, and Papers printed of the Quantity of each and of the Conditions of Sale, as that none ſhall bid leſs than a certain Summ, more than another has bid before, *&c.* during which time of bidding a ſmall piece (about an Inch) of Wax-Candle is burning, and the laſt bidder when the Candle goes out has the Lot or Parcel expoſed to ſale. And if any Difference ariſe, as it often happens in a good

good Lott, that 4 or 5 or more bid together, in this Case the Lott is put up again till the true Buyer can be discovered in the Judgment of Standers by appointed for that purpose, which Buyer is bound to stand to the Bargain, and to take the Lott whether good or bad at the Rate he bought it by being the last Bidder.

Interlopers.] Those that hinder or intercept the Trade of a Company legally established, by the Trading in the same way.

Inventory.] A Catalogue, or a particular Estimation of Goods, *&c.*

Invoyce.] An Accompt of Goods, Custom, Provision, Charges, *&c.* sent from a Person to his Correspondent in another Land.

Invoyce-Tare.] The Tare (or weight of the Cask, Bagg, *&c.* in which Goods are put (mentioned in the Invoyce or Factory.

Journal.] A Book containing a daily Accompt of any Business, or a Merchant's Journal, is a Transcript of the Waste-Book, which in this Book is made Debtor: *Vide* Chap. 1.

Insurer.] (of Ships, Cargo, *&c.*) One who for a Summ of Money paid in hand to him by a Merchant, obliges himself to make good such Ship, *&c.* so far as is the value of that for which he hath receiv'd a *Premium*, in case of Loss by Storm, Pyrates, *&c.* as mentioned in the Policy. Chap. 15.

Ingott.] (of Silver or Gold) an uncertain quantity of Bullion, or melted Gold or Silver.

K.

Key.] A place to Land or Ship off Goods at, the number of which are settled by the Parliament or appointed by the King; Those at present belonging to the Port of *London*, are *Gally-Key*, *Brewers Key*, *Chesters Key*, *Wool-Dock*, *Custom-house Key* (except the Stone Stairs on the *West side* thereof) *Porters Key*, *Bear Key*, *Sabs Dock* (excluding the Stairs there) *Wiggins Key*, *Towers Key*, *Ralphs Key*, *Dice Key* (except the Stairs there) *Smarts Key*, *Somers Key* (except the Stairs there) *Lyon Key*, *Hammons Key*, *Batchelor Wharfe*, *Gawens Key* (except the Stairs on the *East* side) *Cocks Key*, and *Fresh Wharfe*, besides other places for landing Fish, Salt and Provision; as *Billings-gate*, *Bridge-house* in *Southwark*, &c.

Kentledg.] The Ballast of a Ship.

Keel.] The lowest Timber or bottom of a Ship.

Kentall.] *Vide* exchange of Coin, of the Par of Exchange, Gen. Head 3.

Lare-

L.

Lareboard Port.] The left ſide of a Ship.

Laſtage.] The Ballaſt of a Ship.

Laſt.] Of Aſhes for Soap, Cod-fiſh, White Herrings, Meal, Pitch and Tarr, 12 Barrels. Of Red-Herrings—20 Cades; Stock-fiſh—1000; of Dogſtones—3 pair; Flax or Feathers 17 C. of Gunpowder 24 Barrels (or 2400 pound weight: Of Leather 20 Dicker; of Hydes—12 Dozen; of Corn or Rape-ſeed—10 Quarters; and of Wool 12 Sacks.

Leakage.] An allowance to the Merchant (for Liquids) of 12 *per Cent.* And to Brewers 3 in 23 Barrels of Beer, and 2 in 22 Barrels of Ale.

Leaky.] A Veſſel is ſo, when it lets out any of the Liquor therein contained; Or a Ship is ſo when it lets Water come in.

Ledger.] A Book of Accompts, wherein every Man's Accompt, and alſo that of every ſort of Goods bought and ſold by a Merchant are placed each by themſelves: *See* Chap. 10. § 1. and 6.

Letter of Credit] Is a Letter from one Correſpondent to another to requeſt his Crediting the Bearer thereof with a certain Summ of Money therein mentioned: In which Letter it is neceſſary ſome ſpecial token ſhould be mentioned, the better thereby to ſecure both ſides from frauds that might be practiſed in procuring ſham Letters of Credit. *Vide* Chap. 16.

Letter of Advice.] A Letter from one Correſpondent to another, adviſing him what Bills he has drawn on him, *&c. Vide* The Duty of a Factor, Chap. 11.

Letters of Mart.] Letters under the Privy-Seal granted to the King's Subjects with whom Truce is broken upon the Sea, impowring them to take by force of Arms that which was formerly taken from them contrary to the Law of Marque: *Vide* Stat. 4 *Hen.* 5.

Letter of Licenſe.] A Letter of Licenſe is an Inſtrument or Writing granted to a Man that has failed or broke, ſealed and ſigned by his Creditors, which Letter does uſually give a longer time for payment, ſo that the Debtor having this Letter of Licenſe can go about his Buſineſs without fearing an Arreſt. *See* the Form of one, Chap. 15.

Lombard.] A Bank for Uſury, ſo called from the Inhabitants in *Lombard* in *Italy*, who are much concerned in Uſury.

Loan.] Intereſt of Money.

Lot of Goods.] *See* (Inch of Candle) and (Allotting of Goods.)

Livre.] *Vide* the Table in Exchange of Coin.

M.

Manifest.] A Manifest is a Transcript of a Master of a Ship's Cargo, shewing what is due to him for Freight from each person to whom the Goods in his Ship belong.

Mamoodi.] An East-India Coin value our Shilling.

Maneh.] Of Silver, is 60 Shekels or 7*l.* 10*s.* of Gold 100 Shekels or 75*l.* Sterling.

Manuell Goods.] Those whereof present profit may be made.

Manufacture.] A Commodity produced by the work of the Hand, as Cloth, Bays, Serge, Hats, &c. but Wool is in Manufacture because Nature produceth it; but whatsoever Commodities are made by Art of things naturally produced are properly called Manufactures.

Maritime.] Belonging to the Sea.

Mark of Goods.] A distinguishing Characteristick, whereby every Merchant or Trader knows his own Goods and the Prizes thereof, which is sometimes done by Letters of the Alphabet, sometimes by Numbers, and sometimes by other Characters, and particularly the Marks upon the Bales, Chests, Bundles, &c. of Partners is for the most part as in the Bill of Lading, Chap. 15.

Mound.] (of unbound Books is) 8 Bales, each 100*l.* weight or 2 Fats.

Mash.] (of Amber) 2½ pounds weight.

Mudge.] Five hundred Herrings.

Moiety.] One half of any things.

Monopoly.] The buying of any Commodity up, so that none can sell or gain by it but one person, or Partners in Company.

Mortgage.] A Pawn of Lands, Goods, &c. in Credit or Depositum whereon to borrow Money, which [Goods, &c. to be the Lenders, if the Money is not paid back at the time prefixed.

Mounts.] (Of Plaister of Paris) 3000 pound weight.

Mulct.] Fines which a Company have power to lay on Ships or Goods belonging to their Members, to raise Money for the use of such Company for maintenance of Consuls, or to make Presents to Foreign Princes, &c.

Murage.] Toll taken of every laden Cart or Horse toward the repair of the Walls of a Town or City.

N.

Napery.] Linnen-Cloth or Table Linnen.

Naveall.] Belonging to the Sea.

Navy.] A Fleet of Ships.

Naufrage.] Shipwreck.

Navigable.] Sailable, or which may be sailed in.

Navigation.] The Art of Sailing, as also the manner of Trading

ding by Sea called Merchandizing.

Noulage.] The Freight or Summ paid for carrying Goods by Sea.

Neat-weight.] The weight of the pure Commodity alone, without the Cask, Bag, &c. And (in Commodities that have any) when the Dust, Dross, &c. is taken out by Garbling, &c.

Negotious.] Full of Business.

Nest.] (of Chests or Coffers) q.

Notary Publick.] A kind of Scrivener, who publickly takes notice of Contracts, Drafts, Procests, Foreign Bills, &c.

Note for Money.] A short Writing, whereby one Man promiseth to pay another a Summ of Money under his Hand: *Vide* Chap. 15.

Noting a Foreign Bill.] A Publick Notary's going to be a Witness or take notice that a Merchant will not accept or pay it.

O.

Obligor.] He that enters into Bond.

Obligee] He to whom a Bond is made.

Oke] A *Turkish* weight: See Exchange of Coin, *Turky* weight.

Oakum.] Tow or Flax to drive into the Seams of a Ship.

Ork.] A Butt for Figgs or Wine.

Omer.] A *Jewish* Measure of 3½ Pints.

Orgall.] The Lees of Wine dryed used by Dyers to make Cloth take Colour.

Orlop.] Any Deck of a Ship but the first.

Overset.] When the Ship is overturned.

Ouster le Mer.] An excuse for not appearing in Court by being beyond Sea, *&c. Set 4 H. 7.*

Owlers.] They that carry Sheeps-wool or any prohibited Goods in the Night to the Seaside in order to Shipoff contrary to Law.

P.

Pack of Wool.] 19 Stone and 2 pounds, or 240 pound weight.

Part.] Five Foot.

Packer.] He that makes up Barrels of Herrings, *&c. See* 15 *Car.* 2.

Pagod.] A piece of *Indian* Gold worth about 10 *l.* Sterling.

Palingman.] A Merchant Denizen born.

Pariation.] Evenness of Accompts.

Pancart.] A Paper of the Rates and Customs due to the *French* King.

Par of Exchange.] *Vide* Exchange of Coin.

Pawn-Brokers.] They that lend Money upon any sort of Goods or Commodity.

Passagio.] A Writ for the Keepers of a Port to grant passage over Sea.

Pattacoon.] A *Spanish* piece of Money about 4s. 8d. Sterling.

Partart.] A *Dutch* Stiver 5 of which make 6d. Sterling.

Pesage.] Custom for weighing.

Pesterable-wares.] Those that are troublesome and take much room up in a Ship.

Petty Tally.] A Competency of Provision in a Ship.

Piccage.] Money paid at Fairs or Marts for breaking the Ground to set up Booths.

Piece of Eight.] 4 sorts; *See* Par of Exchange.

Pocket of Wool.] Part of a Pack, about half.

Policy of Insurance.] An Instrument or Writing given by the Insuror of Ships, Goods, Houses, &c. to Merchants, &c. to oblige themselves to pay the Sum insured in case of Loss: *Vide* Chap. 15.

Poop.] The uppermost part a Stern, the Ship's Hull.

Portgreve.] The Governour of a Port-Town.

Port-Sale.] A publick sale of things to them that bid most.

Poundage.] A Duty granted the King of *England*, of 12 d. for every 20s. value of all Goods Exported or Imported, except such as pay Tunnage and Bullion, and Diamonds, and a few others.

Post an Accompt.] Is to put an Accompt forward from one Book to another, as to Tranſcribe what is written in the Waſte-Book into the Journal, &c. *Vide* Chap. 10. Sect. 8.

Præmunire.] The firſt buying of any thing.

Premium.] A Reward, or the Money given for Inſuring Ships, Goods, Houſes, &c.

Price Currant.] A weekly Accompt published in *London* of the Currant value of moſt Commodities.

Prizage Wine, &c.] Such as is taken from Enemies by way of Prize.

Prize-Office.] An Office appointed for the Sale of Ships taken Prize.

Primage.] A small but cuſtomary Allowance to the Maſter of a Ship for his Sailors, paid at the Lading of a Ship.

Prohibited Goods.] Such Goods as are not to be Exported or Imported.

Prompt Payment.] Preſent Payment.

Protest of a Bill of Exchange.] *See* Chap. 11. Sect. 1. and the Form of one, Chap. 15.

Proviſion.] The Wages due to a Factor: *See* Chap. 11. §. 2.

Publick Notary.] *See* Notary-Publick.

Puncheon.] Of Wine—84 Gallons; of Pruons 10 to 12 hundred weight.

Q.

Quarter-Deck.] Over the Steerage as far as the Captain's Cabbin.

Quarter-Wind.] When all the Sails may draw together.

Rack-

Rack-Vintage.] A second Voyage of our Merchants into *France* for Rac. Wine.

Rack-Wine.] Wine cleanſed and drawn from the Lees.

Ryall.] A *Spaniſh* piece of Money about 6*d.* Sterling.

Ream.] of Paper, 20 Quires.

Rebate.] An abating what the Intereſt comes to, in conſideration of prompt payment and in ſtrictneſs Rebate ought to be allowed for prompt payment of the Intereſt, but that is not often regarded. *See* Diſcount.

Reed.] A *Turkiſh* Meaſure, 3 Yards 3 Inches.

Regrater.] One that buyeth and ſelleth again in the ſame Market, or within four Miles thereof.

Remancipate.] To ſell or return a Commodity to him that firſt ſold it.

Rialto.] A Marble Bridge at *Venice* where the Merchants meet.

Rotello.] A *Turkiſh* weight: *See* Exchange, the Equation of weights.

Rupee.] An *Eaſt-India* Coin worth 2*s.* 6*d.* Sterling.

Rundlet.] An uncertain Quantity of Liquids from 2 to 20 Gallon.

Rigging.] The Ropes, *&c.* belonging to the Yard and Maſts of a Ship.

Rix Dollar.] *See* the Table in the Par of Exchange.

Roll.] (Of Parchment) 60 Skins.

Rot.] A *Portugal* Coin: *See* the Table in Exchange.

Sack.] Of Cotton Wool 1½ *C.* to 4 *C.* of Sheeps-Wool 26 Stone of 14. to the Stone, but in *Scotland* 24 Stone of 16. each Stone.

Salvage.] An Allowance made both by the Statute and Civil Laws to ſuch as ſave Ships or Goods from danger of Seas, Enemies, *&c. See* a late Statute made 4 and 5 *W. M.* c. 25.

Sarpliar.] A piece of Canvas to warp Wares in.

Seam.] Of Glaſs, 24 Stone, each 5 pounds weight; of Malt, 8 Buſhel.

Seron.] Of Barilla 4 *C.* Almonds 2 *C.* Anniſeeds 2 to 4 *C.* and Caſtle-ſoap 2½ *C.* to 3½ *C.*

Shock.] (of Soap-boxes, Canes, Wood-Trays, *&c.*) 60.

Skipper.] A Seaman.

Scavage.] A Duty formerly laid on Merchant Strangers Goods Imported or offered to Sale.

Seignorage.] An Allowance to the King or Prince for Gold and Silver brought to the Mint to be Coined.

Seiſure.] To make ſeiſure is to ſeize prohibited Goods, *&c. See* 14 *Car.* 2 Ch. 11. Rev. 6. *W. M.* c. 1.

Semidole.] Half a Tun of Wine or 1 Pipe.

Seraph.] A *Turkiſh* Gold Coin about 5*s.* Sterling.

Sound.]

Sound.] To Sound (at Sea) is to make tryal how many Fathom the Sea is in depth, which is done by a Sounding Line (which is 20 to 200 Foot long marked at 3, 10 and 17 Foot with Leather, and at 5. with white and 7 with red Rags) and a Sounding Lead which is about 7 pound weight.

Sort.] Of Ballances 12 Dozen

Smugglers.] Those that conceal prohibited Goods, against whom there are many severe Statutes, as 14 *Car.* 2. Chap. 11. Rev. 6. *W. M.* c. 1. *&c.*

Span.] 9 Inches.

Staple.] A publick Mart by 27 *Edw.* 3. *&c.* settled and appointed to be kept constantly at *York, Lincoln, Newcastle upon Tine, Norwich, Westminster, Canterbury, Chichester, Winchester, Exeter* and *Bristow*, to which places Merchants and Traders were to carry to sell there

Staple Goods.] Wool, Leather, Lead and Wool-fells, tho' now by Staple Goods is generally meant any good vendible Commodity not easily subject to perish.

Stack.] (of Wood) 3 Foot long, 3 Foot broad, and 12 Foot high.

Stand.] (of *Burgundy* Pitch) 2½ *C.* to 3 C. weight.

Stare-board.] The Right-side of a Ship.

Staticks.] The Science of Weights and Measures.

Statute-Merchant.] (or Statute Staple) Bonds made and acknowledged as directed by the Statutes.

Storage.] Ware-house-room.

Stelionate.] Deceit in Merchandize.

Subbastation.] Selling Commicate Goods under a Spear.

Subscribe.] To underwrite any Instrument or Writing.

Sultanin.] A *Turkish* piece of Gold about 8 *s.* sterling.

Supercargo.] One employed by the Owners of a Ship to go a Voyage to oversee the Cargo, and to dispose of it out, and in to the best advantage of the Owners, for which service he is allowed good Provison, because the Trust imposed on him is very considerable.

Surcharge.] Charge upon Charge, or the Charge in any thing which is over and above that which is just and right.

Suttle-weight.] *See* Ch. 9. § 1.

T.

Tackle.] (of a Ship) The Ropes, *&c.*

Tally.] A cleft piece of Wood given by the Officers of the Exchequer to such as pay Money thereunto upon Loans, *&c.*

Tally-man.] One that sells all manner of Houshold Goods, Linnen, Woollen, *&c.* to be paid by so much a Week, in which method he usually extorts a prodigious advantage from the Buyer

Tay-

Tallent.] (in weight) 62 pounds Troy.

Tarpaulin.] A tarred Canvas laid on the Deck of a Ship to keep the Weather out.

Tellers.] Four Officers that receive the Money in the Exchequer.

Tydes-men.] Officers attending Ships untill the Custom be paid.

Tunnage.] Custom granted the King of *England* for Liquids Imported or Exported: *See* the 1st granted 43 *Edw.* 3.

Transier.] A Custom-house Warrant or Let-pass.

Transport.] To carry over-Sea.

Tronage.] Custom for weighing Wool.

Tubb.] Of Tea, about 60 lb; Camphire 56 to 86 lb; Vermillion 3 to 4 C.

Timber.] Of Furrs 40 Skins.

Tun.] Of Timber 40 solid Foot.

V.

Villein.] (Fleece of Wool) that which is shorn from a scabbed Sheep.

Vintage.] Grape-gathering.

Uncustomed Goods.] Those that have not paid Custom. *Vide* 14 *Car.* 2 c. 11. Rev. 6. *W. M.* c. 1.

Usance.] Is here in *England* for the most part reckoned a Calendar Month, as from *January* the 10th to *Feb.* the 10th; double Usance 2 such Months, *&c. Vide* Chap. 11. §. 1.

W.

Waga.] A Weigh, or 256 lb.

Water-born.] Just a float.

Wharfage.] The Fee paid for Landing or unlading Goods at a Wharf.

Wool-drivers.] Those that buy Wool of Sheep-masters and carry it on Horseback to sell.

Wool-winders.] They that are sworn truly to bundle up Fleeces between the Buyer and Seller.

Wreck.] The perishing of a Ship and every person in it; what part is cast ashore belongs to the King, but if any Creature in the Ship escape, the Goods are still the Owners, if claimed within a 12 Month and a Day.

Weigh.] Of Glass = 60 Bunches; of Salt or Corn = 40 Bushels.

Y.

Yard.] (of a Ship) The Timber cross the Mast, at which the Sails hang; and the Main-Yard is ⅚ of the Keels length.

Z.

Zacca.] The Mint at *Venice.*

Zachine.] A Gold Coin worth about 7*s.* 6*d.* Sterling.

CHAP.

CHAP. XV.

Contains the Form of such Writings as are commonly used by Merchants and Traders.

I Have not inserted the following Presidents with design that the Merchant, *&c.* should be at the trouble of writing them over upon occasion, which would be too tedious, but chiefly that young Merchants and Traders by reading them, may be well acquainted with the Nature thereof, and may thereby know how to fill up Blank Bills of Lading, Policies of Insurance, Charter Parties, *&c.* tho' there are some others of which there are no Blanks ready printed, as Bill of Exchange, Notes, Invoyces, Letters of Credit, Letters of License, *&c.* which they that have occasion must write over, and for their Service a Form or Method may not be useless, especially to such as have not seen much of the Affairs of the World; and for these Reasons I have in Alphabetical Order given an Example of all the most material Writings subservient to Trade that I could think of.

§. 1. *An Arbitration Bond with a Condition thereto annexed.*

This Instrument is very usefull among Merchants, who upon any slight occasion do not usually go to Law, but referr the Matter to be decided by two knowing Men; or if they two cannot agree it is often determined by an Umpire, or one Man, chosen indifferently by both Parties; to stand to whose Award, final Determination, or Umpirage, the disagreeing Parties commonly give each other mutual Bonds

In this form.

Note, That the words variable, I have included in a Parathesis, between 2 Crotchets, thus [ ]

NOverint universi per presentes [*me Benjaminum Bidfare de London in Com' Middlesex, Mercator*] *Teneri & firmiter Obligari* [*Willielmo Wellmeant de London predic' Mercator, in Centum*] *Libris bona & legalis Monetæ Angliæ solvend' eidem* [*Willielm. Wellmeant,*] *aut suo certo Attornat. Executor. vel Administrator. suis: Ad quam quidem solutionem bene & fideliter faciend. Obligo me Heredes, Executores & Administratores meos firmiter*

firmiter per presentes sigillo meo sigillat. dat [*primo die Maii*] *Anno Regni Dom. nostr. Willielmi Tertii, Dei gratia Angliæ, Scotiæ, Franciæ & Hiberniæ Regis fidei Defensoris, &c.* [*Nono*] *Annoque Dom.* 1697.

The Condition of this Obligation is such, That if the above bounden *Benjamin Bidfare* of *London*, Merchant,] his Heirs, Executors, and Administrators for his and their Parts and Behalfs, doin all things well and truly stand to, obey, abide by, perform, fulfil, and keep the Ward, Order, Arbitrament, final End and Determination of [*Anthony Aimwell* and *Michael Makepeace* of *London*, Merchants] Arbitrators indifferently named, elected and chosen, as well on the part and behalf of the above-bounden [*Benjamin Bidfare*] as of the above-named [*William Wellmeant*] to arbitrate, award, order, judge and determine of and concerning all and all manner of Action and Actions, Cause and Causes of Actions, Suits, Bills, Bonds, Specialties, Judgments, Executions, Extents, Quarrels, Controversies, Trespasses, Damages and Demands whatsoever, at any time or times heretofore had, made, moved, brought, commenced, sued, prosecuted, done, suffered, committed or depending by or between the said Parties, so as the said Award be made [and given up in Writing under their Hands and Seals ready to be delivered to the said Parties] on or before the [Fourth day of *June* next ensuing the Date abovementioned.] But if the said Arbitrators do not make such their Award of and concerning the Premises by the time aforesaid; That then, if the said [*Benjamin Bidfare*] his Heirs, Executors, and Administrators, for his and their part and behalf, do in all things well and truly stand to, obey, abide, perform, fulfil and keep the Award, Order, Arbitrament, Umpirage, final End and Determination of [*Ferdinando Finishall* of *London*, Esquire, Umpire indifferently chosen] between the said Parties of and concerning the Premises, so as the said Umpire do make his Award or Umpirage of and concerning the Premises, and deliver the same in Writing under his Hand and Seal to the said Parties on or before [the Fourteenth day of *June* next ensuing the Date aboveſaid.] Then this Obligation to be void, or else to remain in full Force, Strength and Virtue.

Benj. Bidfare.

Sealed and Delivered (being stamp'd according to Act of Parliament) *in the presence of*
A. B.
C. D.

But note, if there is to be no Umpire, you must omit the latter End, from [But if the the said Arbitrators, *&c.*]

§. 2. *A Bill of Debt.*

KNow all Men by these Presents, That I *Nicholas Needem* of *London*, Draper, do owe and am indebted unto *Christopher Creditmuch* of *London*, Merchant, the Summ of Eight hundred Fifty two pounds of lawful *English* Coin, which said Summ I promise to pay unto the said *Christopher Creditmuch*, his Executors, Administrators or Assigns, on or before thee Twenty fourth Day of *June* next ensuing the Date hereof. Witness my Hand and Seal the first Day of *January* 1696.

Sealed and delivered in the presence of
Barthol. Bookall,
Peter Pettycash.

Nich. Needem.

But if the Bill of Debt is for Money borrowed, it may run thus;

REceiv'd and borrow'd of *Christopher Creditmuch* of *London*, Merchant, Eight hundred fifty two Pounds, which I do hereby promise to pay at demand. Witness my Hand,

852 *l.* 00 00

Nich. Needem.

§. 3. *An Inland Bill of Exchange.*

Norwich, June 1. 1697.

AT four Days sight pay unto Mr. *Miles Moneylove*, or his Order, one hundred thirty two Pounds, value receiv'd of *Edmund Easie*, and place it to Accompt as *per* Advice of

To Mr. Paul Punctual
at the Ship in Grace-Church-street, London.

Your Humble Servant,
David Draw-well.

§. 4. *A Foreign Bill.*

London, April 10. 1697. for 1000 ps. 8, at 53⅜ *d.* Sterl: *per* ps. 8.

AT Three Usance pay this my first Bill of Exchange unto Mr. *Peter Peterary*, or his Order, One thousand Pieces of Eight *Mexico* Exchange at Fifty three pence ⅜ Sterling *per* piece of Eight, for the Value receiv'd of *Andreas Amantretia*, and pass it to Accompt as *per* Advice of

To Mr. Peter Paygood,
Merchant in Legborn.

Your Real Friend,
Edm. English.

[(*Vid.* Ch. 11. §. 1.)

§. 5. *The*

§. 5. *The Form of a Bill of Lading.*

Note, that the words between [ ] *are Blanks filled up.*

SHipped by the Grace of God in good order and well conditioned, by [*Francis Fraightwell* of *London*, Merchant, and Company] in and upon the good Ship called [the *Streights-Merchant* of *Dover*] whereof is Maſter, under God, for this preſent Voyage [*Samuel Sailtrue* of *London* Mariner] and now riding at Anchor [in the Port of *London*] and by God's Grace bound for [*Leghorn* in *Italy*;] to ſay, [One Bale of Woollen-Cloth, one Cask of Tinn in Blocks, and one Cask of refin'd Sugar; Contents, *&c.* as *per* Invoyce] being Marked and Numbred as in the Margent, and are to be delivered in the like good order and well conditioned at the aforeſaid Port of [*Leghorn*] (the danger of the Sea only excepted) unto [Mr. *David Dealfair*] Merchant there, or to his Aſſigns, he or they paying Fraight for the ſaid Goods, [two Lyon Dollars *per* hundred weight for the Tinn and Copperas, and one Lyon Dollar and a half *per* Cloth] with Primage and Average accuſtomed. In witneſs whereof the Maſter or Purſer of the ſaid Ship hath affirmed to [Three] Bills of Lading all of this Tenor and Date, one of which [Three] Bills being accompliſhed the other [Two] to ſtand void. And ſo God ſend the good Ship to her deſired Port in ſafety. *Amen.*

Dated in [London *the fourth day of* May, Anno Dom. 1697.]

Inſides and Contents unknown to *Samuel Sailtrue.*

N°. 1. 2. 3.

§. 6. *The Form of a Bill of Parcels for Goods bought at time.*

Mr. *Kendrick Keeptouch*, *London, April* 4. 1697.

BOught of *Phineas Faith* 4 Bales of *French* Cloth, to pay at $\frac{6}{mo}$ as follows;

			l.	*s.*	*d.*	*l.*	*s.*	*d.*
N° 4	*qr.* 3½	pieces Dowlas at	3	06	0 each	11	11	00
7	4	pieces *Ditto* at	4	10	0	18	00	00
8	3	pieces *Ditto* at	4	15	0	14	05	00
14	3	ps. Lockrams at	2	15	6	08	06	06
		13½ pieces in all, at					52	02 06

Another Bill of Parcels.

Mr. *Peter Paydown*, and Comp. *London, April* 10th 1697.

BOught of *Titus Tradewell* for present Money, Twelve Sacks of Cotton, *viz.*

	C.	q.	lb.
N°. 1—*qr.*	3	1	17
2——	2	2	10
5——	2	3	05
6——	3	0	23
	11	3	27
	12	1	01
	24	1	00 Total Gross.
	00	3	13 Tare.
	23	1	15 Suttle 2619 *l.*
			Tret—100½ *l.*

	C.	q.	lb.
N°. 7—2	3	16	
12—3	1	10	
20—3	0	27	
21—2	3	04	
	12	1	01

Net 2518½ at 14*d. per lb.* 146 : 18 : 3.

More, N°. { 30—2 : 3 : 12 / 31—3 : 0 : 10 / 32—3 : 0 : 26 / 40—2 : 2 : 16 } Damag'd.

12 : 0 : 08 Gross.
0 : 1 : 20 Tare.

11 : 2 : 16 Suttle 1304 *l.*
Tret — 50
Net—1254 at 4 *d. per lb.*— 20:16:00

167:14:03.

S. 7. *The*

§. 7. *The Form of a Bill of Entry at the Custom-House.*

London, May 3. 1697.

IN the *Streights-Merchant*, Cap. *Sam. Sailtrue* Master, for *Legborn*.

Francis Freightwell, and Comp. Merchants.

N°. 1—1 Bale *qt.* 9 short Clothes (Wrappers deducted--
2—1 Cask *qt.* Nett 14 C. 3 *q.* 00 *l.* of Tinn in Blocks--
3—1 Chest *qt.* Nett 6 C. 1 *q.* 24 *l.* of Sugar doub. Ref.

§. 8. *The Form of a Bill of Sale.*

The most usual Bill of Sale among Traders is, when a person wanting a Summ of Money, deposits Goods as a Security to the Lender, to whom he gives a Bill of Sale, impowering the Lender to sell the said Goods, in case the Summ borrowed is not repaid, with Interest, at a time prefixed.

It runs thus;

Know all Men by these Presents, That I *Lazarus Lackcash* of *Norwich* in the County of *Norfolk*, Goldsmith, for and in consideration of Fifty Pounds of lawful money of *England*, to me in hand paid by *Dives Doubledun* of *London*, Esquire, the Receipt whereof I do hereby acknowledge, have bargained, sold and delivered, and by these Presents, according to due form of Law, do Bargain, Sell, and Deliver unto the said *Dives Doubledun* Sixteen Grains or four Carats of Oriental Pearl, Nine Grains of brait Diamonds, one Silver Tea-pot, weight 20 Ounces, one Silver Salver, weight 10 Ounces, two Sets of Silver Casters, weight 30 Ounces, and ten Cornelian Rings, sealed up by Consent with my Seal, *To Have and to Hold* the said bargained Premises unto the said *Dives Doubledun*, his Executors, Administrators and Assigns for ever. And I the said *Lazarus Lackcash*, for my self, my Executors and Administrators, the said bargained Premises unto the said *Dives Doubledun*, his Executors, Administrators and Assigns against all Persons, shall and will warrant, and for ever defend by these Presents. *Provided* nevertheless, That if I the said *Lazarus Lackcash*, my Executors, Administrators and Assigns, or any of us, do and shall well and truly pay or cause to be paid unto the said *Dives Doubledun*, his Executors, Administrators or Assigns, the Summ of Fifty Pounds Principal, and

thirty

thirty Shillings, half a Years Interest thereof, on the first Day of *November* next ensuing the Date hereof for Redemption of the said Bargained Premises; then this present Bill of Sale shall be void, or else to remain in full Force. *In Witness* whereof I have hereunto set my Hand and Seal the first Day of *May*, *Anno Dom.* 1697. and in the Ninth Year of the Reign of our Sovereign Lord *William* the Third, King of *England*, &c.

Sealed and Delivered, &c. *Lazarus Lackcash.*

A. B.

C. D.

§. 9. *The Form of a Charter-party of Affraightment.*

What a Charter-party is you will find in the Dictionary and elsewhere, which will also appear very plain by this following Form, to be given to the Merchant by the Master, and the like by the Master to the Merchant mutually signed, *&c.*

THIS Charter-party of Affraightment indented, made, and agreed upon the Twenty first Day of *April*, *Anno Dom.* 1697. and in the Ninth Year of the Reign of our Sovereign Lord *William* the Third, King of *England*, &c. Between *Herbert Haulaway* of *Deptford*, Mariner, Master (under God) of the good Ship or Vessel called the *Fortunate*, of the Burthen of Three hundred Tuns or thereabouts, now riding at Anchor in the Port of *Plymouth*, of the one part; and *Giles Growrich* of *Portsmouth* in the County of Merchant, of the other part, Witnesseth, That the said Master hath granted and lett to Freight the said Vessel unto the said Merchant; and the said Merchant hath hired the said Vessel for a Voyage with her to be made in Manner and Form following; That is to say, The said *Herbert Haulaway* for himself, his Executors and Administrators doth Covenant, Promise and Grant to and with the said *Giles Growrich*, his Executors and Administrators by these Presents, That the said Vessel with the first Wind that God shall send after the Twentieth Day of *May* next ensuing the Date above, shall depart from the said Port of *Plymouth* with such lawful Goods and Merchandizes as it shall please the said *Giles Growrich* or his Assigns in the mean time to Lade on Board her: And that it shall be lawful to and for the said *Giles Growrich*, his Factors and Assigns in the mean time to Lade aboard her all such lawful Goods and Merchandizes as he or they

they shall think fit, which she may reasonably carry over and above her Victuals, Tackle, and Apparel. And that the said Vessel shall by God's Grace, directly, as Wind and Weather will serve, sail unto the Port or Harbour of *Aleppo* in *Turkey*, and there deliver unto the said *Giles Growrich*, his Executors, Administrators, Factors or Assigns, all such Goods and Merchandizes as shall be laden on board of her by the said *Giles Growrich*, his Executors, Administrators, Factors or Assigns, dry and well conditioned, danger of the Sea, Fire, Enemies, and Embargo of Princes only excepted. And after her clearing and right discharge of such Goods as she shall receive into her within the said Port of *Plymouth*, shall receive into in the said Port of *Aleppo* her full Lading in such lawful Goods and Merchandizes as it shall please the said *Giles Growrich*, his Executors, Administrators, Factors or Assigns, to lade or cause to be laden aboard her; and after such her full Lading at the Port of *Aleppo* aforesaid, shall directly sail, as Wind and Weather will permit to the said Port or Harbour of *Plymouth* aforesaid, and there deliver to the said *Giles Growrich*, his Executors, Administrators, Factors or Assigns within the space of ten working Days hereafter mentioned, the said Goods and Merchandizes so received into her at *Aleppo* aforesaid, dry and well conditioned, and make a right Discharge and End of the said Voyage, the Danger of the Sea, Fire, Enemies, and Embargo of Princes and Rulers only excepted: And that the said Vessel, after her Arrival at *Aleppo* aforesaid, shall stay at Anchor there for her Unlading and Relading sixty working Days, and shall stay at an Anchor at the said Port of *Plymouth* after her return again and Arrival there from *Aleppo* aforesaid, Ten working-days for the Delivery of the said Goods so to be laden aboard of her at *Aleppo* aforesaid. And the said *Giles Growrich*, for himself, his Executors, and Administrators doth further Covenant, Promise and Grant to and with the said *Herbert Haulaway*, his Executors, and Administrators, and also warrant by these Presents, That the said Vessel at her departure from the said Port of *Plymouth*, and during her said Voyage, shall be strong and staunch, and sufficiently Victualled, Tackled and Apparelled, and furnished with Masts, Sails, Sail-Yards, Anchors, Cables, Ropes, Cords, Tackle, Apparel, Boat, and all other Furniture whatsoever requisite or needful for such a Vessel for such a Voyage. And the said *Giles Growrich*, for himself, his Executors and Administrators, doth Covenant and Grant to and with the said *Herbert Haulaway*, his Executors and Administrators, not only to Unlade and Relade

and

and dispatch away the said Vessel at and from *Aleppo* and *Plymouth* aforesaid, within the time and times before therefore limited and agreed upon, but also for the Freight or Hire of the said Ship or Vessel for all the said Voyage, *viz.* from *Plymouth* to *Aleppo*, and from thence back to *Plymouth*, well and truly pay or cause to be paid unto the said *Herbert Haulaway*, his Executors, Administrators or Assigns, the Summ of Three hundred and fifty Pounds of lawful *English* Coin in manner and form following, that is to say, The Summ of 58 pounds at the said Port of *Aleppo* within twenty days next after the arrival of the said Ship or Vessel and delivery of the said Goods well conditioned at *Aleppo* aforesaid, and two hundred ninety and two pound more, residue of the said Three hundred and fifty pounds at *Plymouth* aforesaid, within ten working days after the return again and arrival of the said Ship or Vessel from *Aleppo* to *Plymouth*, and the Delivery of the said Goods so to be received into her at *Aleppo* aforesaid, unto the said *G. Growrich*, his Executors, Administrators, Factors or Assigns at *Plymouth* aforesaid, well conditioned as aforesaid; together with Primage and Average, according to the Use and Custom of Merchants. And the said *Giles Growrich*, for himself, his Heirs, Executors and Administrators doth Covenant and Grant to and with the said *H. Haulaway*, his Executors and Administrators by these Presents, that in case the said Vessel shall through the Default of the said *G. Growrich*, his Factors or Assigns, stay for her Unlading or Reading at *Aleppo* aforesaid, or for her Lading at *Plymouth* aforesaid, before her departure from thence; or for her Unlading at *Plymouth* aforesaid, after her Return and Arrival from *Alleppo* aforesaid to *Plymouth* aforesaid, after the several days therefore abovementioned, That then the said *G. Growrich*, his Executors or Administrators shall and will pay, or cause to be paid unto the said *H. Haulaway*, his Executors or Administrators the Summ of Thirty Shillings Sterling for every working-day that the said Vessel shall either stay at *Aleppo* aforesaid for her Unlading and Reading, or at *Plymouth* aforesaid, for her Lading or Unlading after the Days above limited and agreed upon; and to the performance of all and singular the Covenants and Agreements abovementioned, which on the part and behalf of the said *Herbert Haulaway*, his Executors or Administrators are to be performed in all things as aforesaid, the said *H. Haulaway* bindeth himself, his Executors and Administrators, and especially the Ship or Vessel aforesaid, with her Freight, unto the said *G. Growrich*, his Executors and Administrators in the Summ

or

or Penalty of 400 *l.* of lawful Money of *England* well and truly to be paid by theſe Preſents; and likewiſe for the performance of all and ſingular the Covenants and Agreements abovementioned, which on the part and behalf of the ſaid *G. Growrich*, his Executors and Adminiſtrators are and ought to be performed in all things as are above-recited, the ſaid *G. Growrich* bindeth himſelf, his Executors and Adminiſtrators, and Goods, unto the ſaid *H. Haulaway*, his Executors, and Adminiſtrators in the Summ or Penalty of 400 *l.* of like Money of *England*, well and truly to be paid by theſe Preſents. *In Witneſs* whereof, the Parties firſt above named to theſe Charter-parties Indented, interchangably have ſet their Hands and Seals the Day and Year firſt above-written.

Sealed and Delivered, &c. *Herbert Haulaway.*

§. 10. *The Form of a General Releaſe.*

KNow all Men by theſe Preſents, That I *Henry Haveall* of *London*, Merchant, have Remiſed, Releaſed, and for ever Quit-claimed, and by theſe Preſents do for me, my Heirs, Executors and Adminiſtrators, Remiſe, Releaſe, and for ever Quit-claim unto *Patrick Peaceable* Citizen and Larimer of *London*, his Heirs, Executors and Adminiſtrators, all and all manner of Actions, Cauſe and Cauſes of Actions, Suits, Bills, Bonds, Writings, Obligations, Debts, Dues, Duties, Accompts, Summ and Summs of Money, Judgments, Executions, Extents, Quarrels, Controverſies, Treſpaſſes, Damages and Demands whatſoever, both in Law and Equity, or otherwiſe howſoever, which againſt the ſaid *Patrick Peaceable* I ever had, now have, and which I, my Heirs, Executors and Adminiſtrators ſhall or may have, claim, challenge or demand, for or by reaſon or means of any Matter, Cauſe or Thing, from the beginning of the World to the day of the Date of theſe Preſents: In Witneſs whereof I have hereunto ſet my Hand and Seal the Tenth day of *April*, *Anno Dom.* 1697.

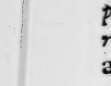
Sealed and Delivered in the preſence of
Simon Saywell,
Lawr. Lackwitt.

Hen. Haveall.

§. 11. *The Form of an Invoyce or Factory.*

INvoyce (or Factory) of 6 Hogſheads of Tobacco, 12 Barrels of Orchall, 5 Bags of Shomack, 3 Cheſts of Sugar, and 3 Bales of Woollen-Cloth Shipt on Board the *Streights-Merchant*, *Theoph. Throughpaſte*,

paste, Master, for the proper Accompt and Risque of *Marmaduke Maridant*, Merchant in *Leghorn*, and consigned to himself, being mark'd and number'd as *per* Margent; Contents, Costs and Charges as follows.



Best bright Tobacco 6 Hogsheads, *viz.*

	C. Q. lb.		C. Q. lb.		C. Q. lb.		C. Q. lb.
N°. 1 *qt.*	2:3:07,	Tare	0:2:14	N°. 4	4:1:27	Tare	0:3:04
2	3:1:10,	Tare	0:2:20	5	2:2:20	Tare	0:2:10
3	3:3:00,	Tare	0:2:00	6	5:2:10	Tare	0:3:12
Gross	9:3:17		1:3:06	Tare	12:3:01	Gross	2:0:26 Tare.
Gross	12:3:01						1:3:06 Tare.
	22:2:18	Total Gross.					4:0:04 Total Tare.
	4:0:04	Tare					
	18:2:14	Suttle, 2086 lb.					
		Tretr, . .	80 lib.				
		Nett	2006 lb. at $8\frac{1}{2}$ *d. per* pound			*l.*	62:13:09

Orchall, *viz.*

N°. 7 to 18 *qt.* 12 Barrels at 14 *s. per* Barrel——— 08:08:00

Shomack 5 Baggs, *viz.*

N°. 19. *qt.* Nett.	2:2:07	N°. 22	3:0:06		
20	2:0:24	23	2:1:20		
21	1:3:17				
	6:2:20		5:1:26		
	5:1:26				

In all 12:0:18 at 12 *s. per* Hundred——7:5:11

Sugar Double Refin'd 3 Chests. *viz.*

N°. 24 381 *l.*
25 505 *l.*
26 326 *l.*

1212 *l.* Nett at 18 *d. per lb.*——————90:18:00

Cloth 3 Bales, *viz.*

N°. 27, 28, 29 *qt.* each (with Wrappers) 10 short Clothes at 12 *l. per* Cloth——— 360:00:00

l. s. d.

——— 529:05:08

Charges.

To Custom of all	053:19:09¼
To Cost of 3 Chests for the Sugar	000:18:00
Ditto of 3 Wrappers for the Cloth	000:07:00
Brokage at ½ *per Cent.*	002:12:10¾
Storage	001:00:00
Cartage and Porterage	000:10:06
	588:13:10
To my Commission at 2½ *per Cent.*	014:14:04

Laus Deo, London, May 4. 1697; Errors excepted *per Tim. Trusty.*

§. 12. *The*

§. 12. *The Form of a Letter of Credit.*

The Forms of Letters of Credit may be various and yet valid and authentick, one of which may ſerve, if it be of this Nature, to be altered according to the Circumſtances of the Correſpondents. *Vide* Chap. 12. (Example)

S I R,

THe laſt of Yours which I receiv'd, was dated the 24. *ultimo*, by which I underſtand you have mine of the 20th *Ditto*, and I hope by this time you have accompliſhed the Affair therein mentioned; as to the Purport of yours, aſſure your ſelf, it ſhall be punctually obſerved, of which more *per* next; in the *interim* I intreat you to furniſh the Bearer hereof, Mr. *Matthew Meanwell*, with the Summ of Fifty Six Pounds Sterling at ſuch time as he ſhall require the ſame, and place it to my Accompt, for which this my Letter of Credit, together with his Receipt, ſhall be your ſufficient Voucher and Warrant, giving upon (Payment) a Line or two of Advice to

To Mr. Nicholas Neverfail
Merchant in Hull.
London, May 1. 1697.

Your real Friend and Servant,
Samuel Standfaſt.

§ 13. *The Form of a Letter of Licenſe.*

TO all People to whom this preſent Writing ſhall come, We whoſe Names are underwritten, Creditors of *Oliver Overſhot* of *London*, Haberdaſher, ſend Greeting: *Whereas* the ſaid *Oliver Overſhot* at this preſent time doth ſtand indebted and juſtly oweth unto us the ſaid Creditors of him the ſaid *Oliver Overſhot*, divers and ſundry Summs of money, which by reaſon of many Debts (and ſome of them very great) that are likewiſe juſtly owing to him the ſaid *Oliver Overſhot*, and cannot be recovered without ſome time of Reſpit, he is very much diſabled at preſent to make payment unto us his ſaid Creditors our whole and juſt Debt, as he ſeemeth willing and deſirous: In conſideration whereof he inſtantly deſireth us, That we the ſaid Creditors, and every of us, would be pleaſed to give and grant unto him the ſaid *Oliver Overſhot*, his Executors, Adminiſtrators or Aſſigns, ſuch Liberty and Reſpit of Time for the payment and ſatisfaction of our ſeveral Debts as he thinketh reaſonable for the obtain-

ing, getting and recovering of his ſaid Debts; that is to ſay, That we and every of us would be content to take and accept of our whole Debts in the ſpace of two full Years next after the Date hereof, to be divided into two equal parts to be paid at two ſeveral payments in manner and form following, *viz.* The firſt payment thereof to be made on the firſt day of *May* next enſuing the Date hereof, which ſhall be in the Year of our Lord 1698. and the other Payment or Moiety, the reſidue thereof, to be paid on the firſt day of *May*, which ſhall be in the Year of our Lord 1699. in full payment and ſatisfaction of the ſaid ſeveral Debts. And for the more full performance of the ſaid ſeveral Payments in ſuch manner and form as is above limited and declared, according to the true meaning of theſe Preſents, he the ſaid *Oliver Overſhot* ſhall and will at or before the Tenth Day of this Inſtant *May* become bound unto us the ſaid Creditors reſpectively by one Obligation in due form of Law to be made, including all and every the Payments in ſuch ſort as is above expreſſed, and the Penalty of every Obligation to be double the whole Summ, included in the Condition of the ſame, to be delivered to us, and every of us, our Executors or Aſſigns, at or before the ſaid Tenth Day of *May* next enſuing the Date hereof: *Know* ye therefore, that we the ſaid Creditors whoſe Names are ſubſcribed, and every of us for his own part, and for his Executors, Adminiſtrators and Aſſigns, for the Conſideration abovementioned, do by theſe Preſents willingly conſent, promiſe, covenant and agree to and with the ſaid *Oliver Overſhot*, his Executors, Adminiſtrators and Aſſigns, by theſe Preſents, that we the ſaid Creditors, and every of us, our Executors, Adminiſtrators and Aſſigns, ſhall and will accept of the ſaid *Oliver Overſhot*, his Executors, Adminiſtrators and Aſſigns, all and every of the ſaid Debts and Summs of Money by the ſaid *Oliver Overſhot* unto us and every of us owing and paying upon ſuch Obligations, Aſſurance and Aſſurances as aforeſaid, to be paid in ſuch manner, and at ſuch Days and Times as is above-limited and required. *And further*, if we the ſaid Creditors and every of us, our and every of our Executors, Adminiſtrators and Aſſigns reſpectively, upon the delivery of the ſaid Obligation to us and to every of us, and every of our Executors, Adminiſtrators and Aſſigns ſhall and will at the Charge of the ſaid *Oliver Overſhot*, his Executors, Adminiſtrators and Aſſigns, Seal, Subſcribe and Deliver in Due form of Law unto the ſaid *Oliver Overſhot*, our ſufficient General Releaſe to bear Date and Limitation before the Day of the Date of the ſaid new Obli-

Obligation to be made for the ſame Date. *In Witneſs* whereof we the ſaid Creditors have hereunto ſet our Hands and Seals the Second Day of *May*, in the Ninth Year of the Reign of our Sovereign Lord *William* the Third, King of *England*, &c. and in the Year of our Lord God 1697.

— (*See* [Letter of Licenſe] *in the Dictionary*)

Patrick Peaceable, ⊙
Henry Hopewell, ⊙
Tho. Truelove, ⊙

§. 14. *The Form of a Note for paying Money.*

I Promiſe to pay unto Mr. *Ferdinando Freeman* or Order, on Demand, Six hundred eighty five Pounds, *London*, *May* 6. 1697.

685 *l.*——

Chriſtopher Covetmore.

(*Vid.* Chap 11. Sect. 1. Article 40.)

§. 15. *The Form of a Policy or Inſurance of Goods in a Ship.*

IN the Name of God, Amen; *William Wiſe* of *London*, Merchant, as well in his own Name as for and in the Name and Names of all and every other Perſon or Perſons to whom the ſame doth, may or ſhall appertain in part or in all, doth make Aſſurance, and cauſeth himſelf, and them, and every of them to be Inſured, Loſt, or not Loſt, from *London* to *Cales* upon any kind of Goods and Merchandizes whatſoever, loaden or to be loaden on Board the good Ship called the *Antelope*, Burden three hundred Tuns, or thereabout, whereof is Maſter, under God, for this preſent Voyage *Steven Steerwell*, Mariner, or whoever elſe ſhall go for Maſter in the ſaid Ship, or by whatſoever Name or Names the ſame Ship or Maſter thereof is or ſhall be named or called, beginning the Adventure upon the ſaid Goods and Merchandizes from and immediately following the Loading thereof aboard the ſaid Ship at *London*, and ſo ſhall continue and endure untill the ſaid Ship with the ſaid Goods and Merchandizes whatſoever ſhall be arrived at *Cales*, and the ſame there ſafely landed. And it ſhall be lawful for the ſaid Ship in this Voyage to ſtop and ſtay in any Port and Place whatſoever without prejudice to this Inſurance. And the ſaid Goods and Merchandizes by agreement are and ſhall be valued at the Summ of Four hundred pounds Sterling, without farther account to be given by the Aſſureds for

for the ſame. Touching the Adventures and Perils which we the Aſſurors are contented to bear, and do take upon us in this Voyage, they are of the Seas, Men of War, Fire, Enemies, Pyrats, Rovers, Thieves, Jettizens, Letters of Mart, and Counter-Mart, Surprizals, Takings at Sea, Arreſts, Reſtraints and Detainments of all Kings, Princes and People, of What Nation, Condition or Quality ſoever, Barratry of the Maſter or Marriners, and all others, Perils, Loſſes and Misfortunes that are or ſhall come to the Hurt, Detriment or Damage of the ſaid Goods or Merchandizes, or any part thereof. And in caſe of any Loſs and Misfortunes it ſhall be lawful for the Aſſureds, their Factors, Servants or Aſſigns to Sue, Labour and Travel for, in and about the Defence, Safeguard and Recovery of the ſaid Goods and Merchandizes, or any part thereof without Prejudice to this Inſurance, to the Charges whereof we the Aſſurors will contribute each and according to the Rate and Quantity of his Summ herein aſſured. And it is agreed by us the Inſurors, that this Writing or Policy of Aſſurance ſhall be of as much Force and Effect as the ſureſt Writing or Policy of Inſurance heretofore made in *Lombard-ſtreet*, or elſewhere made in *London*. And ſo we the Aſſurors are contented, and do hereby promiſe and bind our ſelves, each one for his own part, our Heirs, Executors and Goods to the Aſſureds, their Executors, Adminiſtrators and Aſſigns for the true performance of the Premiſes, confeſſing our ſelves paid the Conſideration due unto us for this Aſſurance by the ſaid *William Wiſe*, after the Rate of Eight Pounds Sterling *per Cent.* warranted to depart with Convoy.

In Witneſs whereof we the Aſſurors have ſubſcribed our Names and Summs Inſured in *London*, Dated the Firſt day of *May* 1697.

Memorandum, The Aſſurors do hereby Covenant, Promiſe and Oblige themſelves, their Heirs, Executors and Goods in caſe of Loſs happening (which God forbid) to ſatisfie and pay their ſeveral Summs of Money herein aſſured upon the Abatement only of Ten Pounds *per Cent.* and no more. Provided always that they pay their reſpective Summs of Money by them aſſured according to Subſcription, within one Month after Notice thereof; otherwiſe no Abatement whatſoever to be made, but to pay their full Summs according to each man's Subſcription, any Uſe or Cuſtom to the contrary notwithſtanding. Written the day aboveſaid.

I (*A. B.*) am contented with this Inſurance for One hundred and fifty pounds. Witneſs my Hand, *London*, *Anno Dom.* 1697. } 150

A. B.

I (*C. D.*) am contented with this Inſurance for One hundred pounds; Witneſs my Hand, *London*, *Anno Dom.* 1697. } 100

C. D.

I (*E. F.*) am contented with this Inſurance for One hundred and fifty pounds; Witneſs my Hand, *London*, *Anno Dom.* 1697 } 150

E. F.

§. 16. *Proteſt of a Foreign Bill.*

KNow all Perſons whom this preſent Writing may concern, That the Second Day of *April*, 1697. at the Requeſt of Mr. *Richard Rich* of *London*, Merchant, I *Iſaac Sharp* Publick Notary, ſworn and admitted by Authority of his Sacred Majeſty *W.* 3. King of *England*, &c. did go to the Dwelling-houſe of Mr. *Paul Puttoff*, upon whom the abovenamed Bill of Exchange is drawn, and ſhewed the Original unto the ſaid Mr. *Paul Puttoff*, demanding his Acceptance of the ſame, who anſwered me, he would not accept the ſaid Bill for Reaſons beſt known to himſelf, of which ſhould inform the Drawer Mr. *Frederick Fairfax*. Wherefore I the ſaid Notary did Proteſt, and by theſe Preſents do Proteſt as well againſt the ſaid *Frederick Fairfax*, as againſt the ſaid *Paul Puttoff*, as alſo againſt all other perſons Endorſers, or others therein concerned, for all Changes, Rechanges, Damages and Intereſt whatſoever. In preſence of *A. B.* and *C. D.* called for Witneſſes to this preſent Act done in my Office in *London* the Day and Year aboveſaid.

Iſ. Sharp, Notary Publick.

Note, That this Proteſt is always incerted or written under a Copy of the Bill. *Vide* Chap. 11. Sect. 1.

§. 17. *Th*,

§. 17. *The Forms of Receipts.*

If the Receipt be given in a Book, you need not mention the Man's Name of whom you receive, because that is always imply'd, the Book being his: Thus (if the Receipt be for Goods formerly sold)

	l.	s.	d.
REceiv'd *April* the 1st, 1697, Forty eight Pounds Seven Shillings and Four Pence in full Payment	48	07	04

Daniel Dunwell.

If a Receipt be given upon some other Accompt, to one that keeps no Book for Receipts, by one for Accompt of another, it will run thus;

March 28. 1697.

	l.	s.	d.
REceiv'd of Mr. *Andrew Allpay*, by Order and for Accompt of Mr. *Humphrey Hoardnone*, One hundred Pound; I say receiv'd as aforesaid	100	00	00

per Tho. Trusty.

A Rent-Gatherer's Receipt.

	l.	s.	d.
REceiv'd *April* the 6th. 97. of Mr. *Lewis Livewell* Twenty five Pounds in full for half a Years Rent due at *Christmas* day last, out of which deducted for Taxes Five Pounds, and for Repairs Two Pounds: I say receiv'd for the Use of *Robert Richer*, Esquire, by Virtue of his Letter of Attorney.	25	00	00

By me *Christ. Countwell.*

A Receipt on the backside of a Bill of Exchange.

Admit *Tertullian Trevardo* receives in *Leghorn* the Contents of the Bill mentioned in the 4th Sect. of this Chapter, Mr. *Peter Peterani* first writes his Name on the back side, which is his Order, leaving

leaving room to write a Receipt over it, then the Receipt on the backside stands thus;

June 24th 1697, Receiv'd the full Contents within mentioned, being One thousand pieces of Eight	Ps. ⅝. 1000

Peter Peterani.

Witness *Tertul. Trevardo.*

§. 18. *The Form of the Condition of a Broker's Bond to the Lord Mayor and Court of Aldermen of* London *according to* 8 *and* 9 W. 3.

THE Condition of this Obligation is such, That whereas *A. B.* is Sworn and Admitted a Broker pursuant to a Statute in that behalf lately made. *Now* therefore if the said *A. B.* do and shall well and truly Use, Execute and Perform the Office and Employment of a Broker between Party and Party without Fraud, Covin, or any corrupt or Crafty Devices, according to the Purport, true Intent and Meaning of the Statute in that Case lately made and provided; then this Obligation to be void, or else to remain in full Force and Virtue.

§. 19. *The Form of an Umpirage.*

The Umpire chosen as mentioned in Sect. the 1st of this Chapter making his Umpirage, it will stand thus.

TO all People to whom this present Writing shall come, I *Ferdinando Finishall* of *London*, Esquire, Umpire indifferently chosen by *Benjamin Bidfare* and *William Wellmeant* of *London*, Merchants, having deliberately heard and understood the Griefs, Allegations and Proofs of both the said Parties, and willingly, as much as in me lieth, to set the said Parties at Unity and good Accord, do by these presents Arbitrate, Award, Order, Deem, Decree and Judge that the said *Benjamin Bidfare*, his Executors and Assigns shall well and truly pay or cause to be paid unto the said *William Wellmeant*, his Executors, Administrators or Assigns the full Summ of Thirty five pounds of lawfull Money of *England*, on the Twenty

ninth day of *September* 1697; and that upon payment thereof the said *B. Bidfare* and *W. Wellmeant* shall Seal, Subscribe, and as their several Acts and Deeds deliver each to the other a General Release in Writing of all Matters, Actions, Suits, Causes of Actions, Bonds, Bills, Covenants, Controversies and Demands whatsoever, which either of them hath, may, might, or in any wise ought to have of and against each the other of them by reason aforesaid, or means of any Matter, Cause or Thing whatsoever, from the beginning of the World to the first day of *May* now last past, and in the Tenth Year of the Reign of our Sovereign Lord *W.* the Third, King of *England*, &c. *In Witness* whereof I have hereunto set my Hand and Seal the 12th day of *June*, in the Year of our Lord God 1698.

Sealed and Delivered in the presence of
Bryan Butler,
Char. Cook.

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